

REVIEW OF THE
STUDENT WORK

DEPARTMENT OF ARCHITECTURE
COLLEGE OF FINE ARTS
CARNEGIE INSTITUTE OF TECHNOLOGY

PUBLISHED BY
THE ARCHITECTURAL SOCIETY
SCARAB FRATERNITY

1923

1005

To Mr. Henry McGoodwin

FIRST HEAD OF THE DEPARTMENT OF ARCHITECTURE, WHOSE VISION AND HIGH IDEALS HAVE BEEN THE GOOD FORTUNE OF THOSE STUDENTS EVEN WHO CAME TOO LATE TO KNOW HIM, WE DEDICATE THIS VOLUME IN RESPECT AND ADMIRATION.



HENRY K. McGOODWIN, B.S., S.B.

Foreword



THE purpose of this review is to present to the public some of the work accomplished by the students of the Department of Architecture and to make the policies and organization of the College of Fine Arts better known. Architecture is the only branch of the arts which has so far been correlated with our American college system. Our American schools of architecture are, as a rule, a very satisfactory combination of the Beaux Arts system and a liberal arts curriculum. The graduates of such schools have almost invariably attained positions of importance and stand high in their communities. It is also interesting to note that, when they have taken up other branches of art or business, they have been successful, showing that the fundamental instruction is given on the right principle.

With the American school of architecture as a model the College of Fine Arts has developed similar courses in Painting and Illustration, Drama, Music, Applied Art and Sculpture; and academic studies and technical work are offered in carefully balanced curricula. Students completing the four or five year degree courses are therefore not only thoroughly trained in the technique of their art, but have had in addition experience in the allied arts and a good general education broadening their views and preparing them for their career as artists and their relationship to the community.

The association of these various arts in one building is of very great value. It gives every student an admirable opportunity of developing some appreciation of at least one other art and has the great advantage of producing an art atmosphere thoroughly sympathetic to the arts and inspiring for the individual.

The Department of Architecture of the Carnegie Institute of Technology, founded eighteen years ago, has the advantage of being associated with an institution made up of young and enthusiastic men, broad and progressive in its policy. It has grown up in a city intensely alive, where opportunity for advancement is a constant incentive. Its association with the Carnegie Institute with its exceptionally fine collection of architectural models and sculpture, its permanent exhibition of paintings and the well known annual International Exhibition, the fine library and the Music Hall where many concerts, lectures and other entertainments are given, gives to the Department of Architecture an exceptional background.

It is the policy of the department to bring together for its faculty men who have been thoroughly trained technically and have had in addition practical experience so that the school work is constantly related to professional work. All the work in design is sent to New York to be judged by the Beaux Arts Society juries. This eliminates local and personal prejudices and has proved to be a great incentive.

The students of the department have won many important awards, among them the Municipal Art Society Prize, the Stewardson Prize in 1921 and 1922, the Spiering Prize, the Pupin Prize in 1922, and the first prize and second and fourth places in the Le Brun Competition in 1923. The school was awarded the Gold Medal by the French Government in 1921 as the best architectural school in the United States, and one of its students received a Silver Medal for the highest number of B. A. I. D. medals won by a student during the year.

EDWARD RAYMOND BOSSANGE,
Director of the College of Fine Arts.

April 25th, 1923.

FACULTY OF THE DEPARTMENT OF ARCHITECTURE

THOMAS STOCKHAN BAKER, A.B., Ph.D.

President of the Carnegie Institute of Technology.

EDWARD RAYMOND BOSSANGE

Director of the College of Fine Arts

Ph.B., Columbia University, 1893. Studied in Rome under Garnier and Vermare, 1900-01. In Architectural Practice, New York, 1901-13. Professor of Design, Cornell University, 1913-15. Carnegie, 1915.

HARRY STERNFELD

Professor of Architecture. Head of Department of Architecture

B.S., in Architecture, University of Pennsylvania, 1911; M.S., 1914. Winner of Paris Prize, 1914. Certificate, Ecole des Beaux Arts, 1919-20. American Academy in Rome, 1920-21. Carnegie, 1915.

HENRY HORNBOSTEL

Professor of Architectural Design

Ph.B., Columbia University, 1891; Student, Ecole des Beaux Arts, Paris, 1897; H. Hornbostel, Architect, New York; Ex-President American Society of Beaux Arts Architects.

DOUGLAS DOBEL ELLINGTON

Associate Professor of Architectural Design

B.S., University of Pennsylvania, 1912. Paris Prize, 1911. Ecole des Beaux Arts, Paris, 1912-14. Instructor in Architecture, Drexel Institute. Columbia University, 1914. Carnegie, 1915.

WILLIAM FRANK HITCHENS

Assistant Professor of Architecture

B.S., in Architecture, University of Pennsylvania, 1909. Assistant in Architecture, 1909-10. Carnegie, 1913.

JAMES CADDALL MOREHEAD

Assistant Professor of Graphics. Curator, Department of Architecture

A. B., Roanoke College, 1898; A.M., 1899; M.S., Princeton, 1900; Ph.D., Yale, 1905. Instructor in Mathematics, Northwestern University, 1905-09. Professor Assistant of Mathematics, 1909-12. Carnegie, 1915.

RAYMOND JEAN RICHARDSON

Assistant Professor of Architectural Design

Graduated from University of Pennsylvania, 1914. M.A., University of Pennsylvania, 1915. Instructor, University of Pennsylvania. Won Inter-collegiate Competition in Architecture. Awarded Woodman Travelling Fellowship at University of Pennsylvania, 1920-21 and travelled in France, Italy and Spain.

BERTHOLD F. HASTINGS

Assistant Professor of Construction

Graduated Yale, 1912. Instructor in Civil Engineering, Sheffield Scientific School, New Haven, Conn., 1910-12. University of Pennsylvania, 1913-14. Assistant to Professor J. E. Kirkham, Structural Engineer, Iowa State College, Ames, Iowa. In charge of erection of 16th Street Bridge, Pittsburgh. Carnegie, 1922.

WALTER B. STULEN

Instructor in Architecture

Graduate, Special Course in Architecture, University of Pennsylvania, 1901. Carnegie, 1919.

RAYMOND STEPHEN SIMBOLI

Instructor in Freehand Drawing

Studied at Carnegie Institute of Technology. Hawthorne Scholarship, 1917. Carnegie, 1920

LUTHER LASHMIT

Assistant Instructor in Architectural Design.

B.A., in Architecture, Carnegie, 1921; M. A., 1922.

MEMBERS OF THE FACULTIES OF OTHER DEPARTMENTS GIVING INSTRUCTION TO STUDENTS OF THE DEPARTMENT OF ARCHITECTURE

FREDERIC PIERRE COLETTE

Head of Department of Modern Languages. Professor of Modern Languages

ELIZABETH BALDWIN DEMAREST

Head of Department of History and Political Science. Professor of History

EDMUND ESQUERRE

Head of Department of Student Health. Professor of Hygiene and Dietetics

HAROLD GEOGHEGAN

Professor of Applied Art; Head of Department of Applied Art

HARRY SCOTT LIGHTCAP

Assistant Professor of Mathematics

JOHN DUNCAN McMILLAN

Assistant Professor of English

BERTHOLD NEBEL

Assistant Professor of Sculpture. Head of Department of Sculpture

VINCENT P. SOLLOM

Associate Professor of Industrial Arts

WALTER HANRICHS TRUMBAUER

Assistant Professor of English

GLADYS EVELYN RIGGS

Instructor in Modern Languages

BULLETINS OF THE CARNEGIE INSTITUTE OF TECHNOLOGY

(Entered as Second-Class Mail Matter, November 12, 1912, at the Post-Office at Pittsburgh, Pennsylvania, under Act of August 24, 1912)

Issued at Oakland Station, Pittsburgh, Pa., twenty-four times a year

These publications include:

Suggestions Concerning the Choice of a Course in Engineering
Bulletin—College of Fine Arts
Bulletin—College of Industries
Bulletin—Margaret Morrison Carnegie College for Women
Bulletin—College of Engineering
Bulletin—Night Courses
Bulletin—Summer Courses

Illustrated Bulletins:

Book of Views
Cooperative Mining Courses

THE DEPARTMENT OF ARCHITECTURE OF THE CARNEGIE INSTITUTE OF TECHNOLOGY

IN the summer of 1904 there was held one of the most important American competitions of recent years—that for a large group of buildings for the Carnegie Institute of Technology in Pittsburgh. The competition resulted in the selection of Messrs. Palmer and Hornbostel, of New York, as architects of the buildings. Work upon the buildings was immediately begun, and the Institute opened its doors to students in the fall of 1905.

The Institute includes four distinct colleges, each operating under its local administration, subject to the President of the Institute. These are the College of Industries, the College of Engineering, the Margaret Morrison Carnegie College for Women, and the College of Fine Arts. None of these colleges has reached the final limit of its scope of work, and all are developing rapidly.

COLLEGE OF FINE ARTS—HISTORY

In 1905, the College of Fine Arts or School of Applied Design, as it was then called, was tentatively begun by the opening of night classes in Architecture, under the direction of Mr. Hornbostel, architect of the buildings. The following year a faculty was organized for the Department of Architecture, and both day and night classes were conducted with some fifty students. From this modest beginning, the College of Fine Arts has had a remarkable development. In 1908, a Department of Interior Decoration was organized and in 1909, a Department of Painting and Illustration. These departments were located in the upper end of the Industries Building. The corner stone of the present building was laid on April 25th, 1912, and the new wings were finished in the spring of 1916. In the fall of 1912, the Department of Music was organized, and in February, 1913, a Department of Dramatic Art. The Department of Sculpture was added in 1916. In 1920 the course in Arts and Crafts in the Margaret Morrison Carnegie College for Women was transferred to the College of Fine Arts and combined with the courses in Interior Decoration and Normal Art. To these courses were added new courses in Costume and Printing Design, to form the new Department of Applied Art. As a result of these developments, eighteen courses are now offered in the various departments.

The object of the College is to give the best instruction possible in the above departments, and to add other departments of study of the arts as soon as the demand for them appears and the resources of the institution permit.

The Department of Architecture has easily and quickly taken its place among the best architectural schools in America. The facts that its resources have been adequate, its policy unhampered, and its faculty composed wholly of able men in the prime of their activity and ambition, have contributed largely to this result.

The impression has often been expressed that Pittsburgh is unfavorably situated for the development of such a school. In this connection it may be suggested that the success of artistic studies depends rather on the students and their instructors than on location. But aside from this, the writer considers Pittsburgh an especially good location, for many reasons, of which but a few may be suggested here. For instance, it is a place of the greatest pictorial interest. It has, in the neighborhood of the Institute, a quarter of architectural interest which, in the opinion of most eminent critics, is matched in not more than three or four American cities. The public in general hardly suspects this, but a glance at the photographs accompanying this article may give a suggestion of the truth of the opinion. But best of all, the atmosphere of the place has in it nothing of the dryness and sterility often surrounding places of older and more settled culture and traditions. It is almost supercharged with ambition, with activity, with hope and life. This seems to us the very best milieu for a school of arts.

The Department of Architecture has now the good fortune to be housed in a building really appropriate to an art school—one to be matched, so far as our knowledge goes, by only one other in the world, perhaps, that of the Ecole in Paris. Not that fine buildings make a fine school of architecture. Yet they do help make work convenient and life inspiring and pleasant.

The policy of the department is as free as possible from administrative impediments, and as liberal as possible toward the students in whose interest it has been built up. It is impossible to go into details here, but in brief the policy is to give the best instruction and to assemble for that instruction the most promising students possible. A few items of information are given on an accompanying page. Others are given in the catalogues of the Institution. No details will be mentioned here other than one of first concern to many young men who are considering the study of architecture as a profession—that of expense. There are exceptions to all cases, but in general we do not advise any student non-resident in Pittsburgh to enter the school without fairly certain means of meeting expenses for at least one school year. Means with which to complete the course for graduation—of at least five years for students entering without any advanced credit—is, of course, the provision most to be desired. The whole cost of a year's study naturally varies greatly with individuals. The estimated expense for a year at Carnegie is \$641.00.

Undoubtedly this Department will realize its purpose of becoming an important factor in the development of American architecture and civilization by persisting in its ideal of getting and of giving the best—the best advantages to the best students.

GENERAL INFORMATION

COURSES OFFERED

I. "Regular" Day Course, leading to the degree of Bachelor of Arts in Architecture, requires for completion five years.

II. Post-graduate Course, leading to the degree of Master of Arts in Architecture, requires for completion, one year or more.

III. A partial Course for experienced draughtsmen, requires for completion, two years or more.

IV. A Night Course in Design, Drawing, etc., requires four years or more for completion.

ENTRANCE REQUIREMENTS

Entrance to Course I, is (a) by presentation of a certificate of graduation from an approved high school course; or (b) by presenting a certificate of preparatory work and by passing examinations in certain subjects. Full information is given in the catalogue of the Institute.

Entrance to Course III is by presentation of satisfactory evidence of maturity and approved office experience, and by the recommendation of the professor in charge of the department.

TUITION AND OTHER FEES

The total of tuition and other fees for the school year is as follows:

DAY COURSES

General Fee, for regular students	\$180.00
Student Activities Fee	15.00
Breakage Deposit, (returnable in part)	5.00
	<hr/>
	\$200.00

NIGHT COURSES

	Minimum	Maximum
General Fee	\$30.00	\$50.00
Breakage Deposit	3.00	3.00
	3.00	\$53.90

JUDGMENTS

Courses in design are conducted wholly from programs and by judgments of the Society of Beaux Arts Architects of New York. All work in architectural drawing, freehand drawing, modeling and water color is judged in anonymous competitions by local juries. Advancement from stage to stage of work is based on the results of these competitions, exactly as in the Ecole des Beaux Arts in Paris. A high and constant standard of advancement and of graduation is thus maintained.

STUDENTS

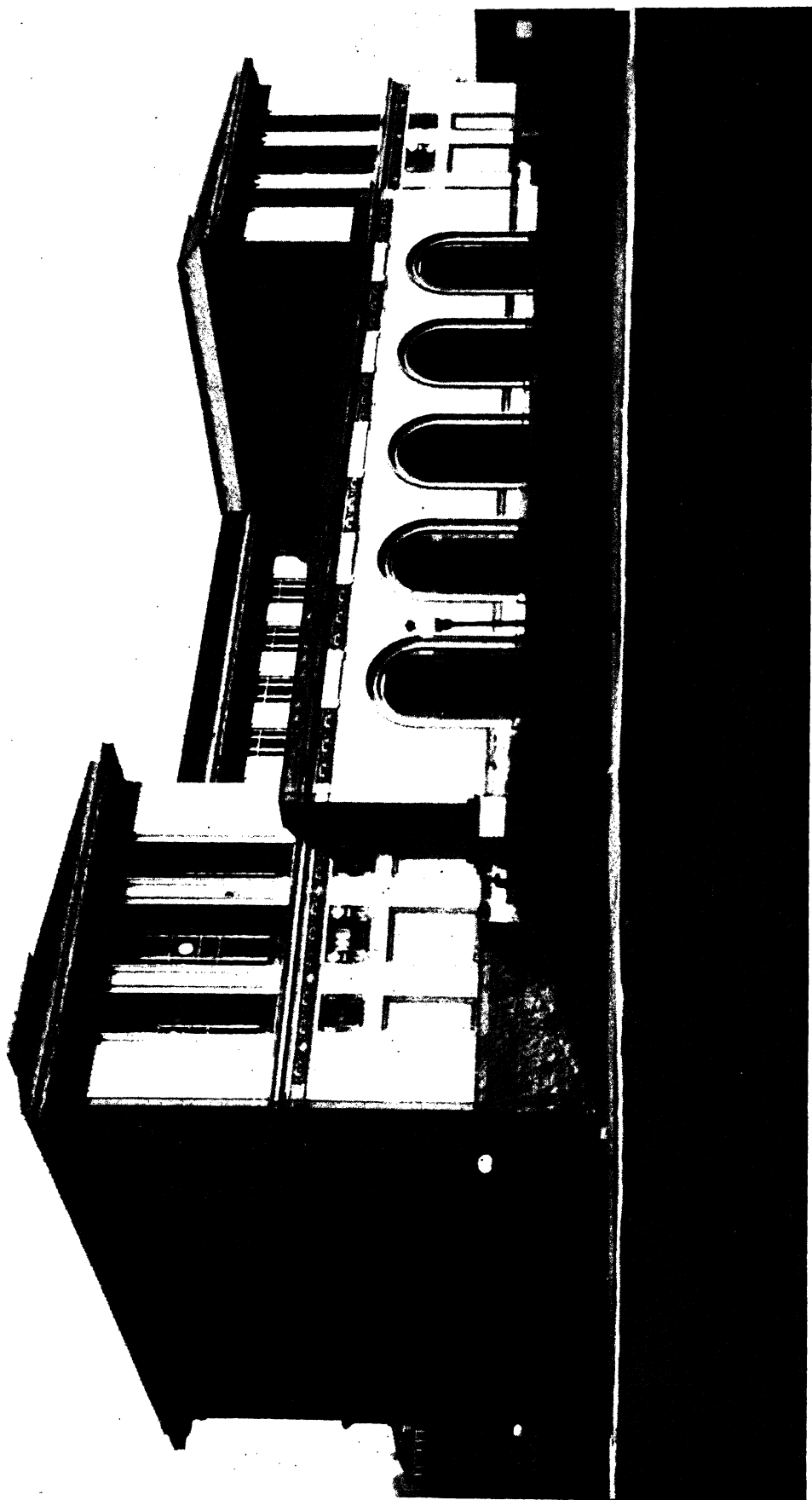
The numbers of students in the Department of Architecture in the year 1922-23. are as follows:

Undergraduate	Course I, 140
Partial Students	Course III, 9
Night Students	Course IV, 73

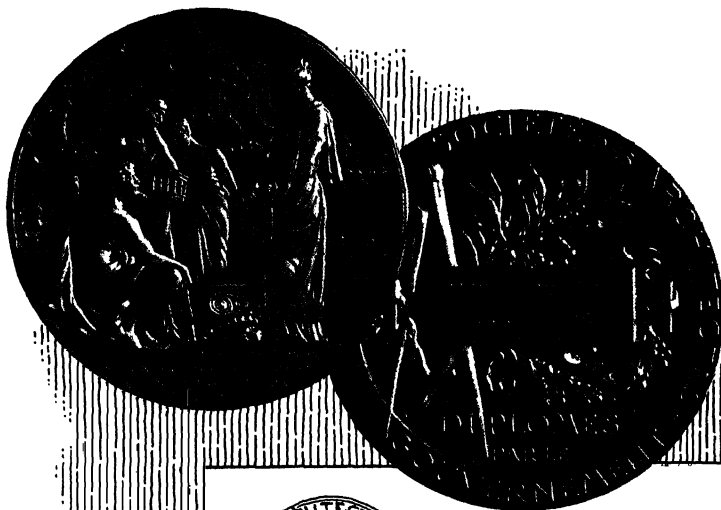
CURRICULUM FOR FIVE YEAR COURSE LEADING TO DEGREE OF BACHELOR OF SCIENCE IN ARCHITECTURE

In Effect September 1923

FRESHMAN YEAR			COURSE NUMBER	SECOND SEMESTER	Units
COURSE NUMBER	FIRST SEMESTER	Units			
A-101	Architectural Design, Class D.....	15	A-105	Architectural Design, Class B.....	16
A-113	Freehand Drawing, Class D.....	4	A-117	Freehand Drawing, Class D.....	3
A-131	Elements of Architecture.....	3	A-123	Modeling, Class B.....	2
C-61	Mathematics-Algebra and Trigonometry.....	12	A-14	History of Architecture.....	4
A-137	Descriptive Geometry.....	6	C-222	French I.....	9
C-331	History of Civilization.....	4	A-142	Theory of Construction C.....	6
C-181	English I.....	9	A-152	Details of Building Construction.....	6
C-521	Physical Training.....	2	A-130	Water Color.....	2
C-501	Hygiene.....	2		Electives (English III, 2-4-6 1 required (Studies in Contem- porary History 2-4-6).....	6
		57			54
SECOND SEMESTER			SUB-SENIOR YEAR		
A-101	Architectural Design, Class D.....	15		FIRST SEMESTER	
A-113	Freehand Drawing, Class D.....	4	A-105	Architectural Design, Class B.....	21
A-132	Elements of Architecture.....	3	A-119	Freehand Drawing, Class A.....	3
C-52	Mathematics-Analytic Geometry.....	12	A-125	Modeling, Class A.....	2
A-138	Shades and Shadows.....	6	A-133	Professional Ethics and Civic Relations.....	2
C-332	History of Civilization.....	4	C-223	French II.....	9
C-182	English I.....	9	A-143	Theory of Construction B.....	8
C-522	Physical Training.....	3	A-153	Working Drawings and Specifications.....	4
		56	I	Plumbing and Sanitation.....	3
SOPHOMORE YEAR				Water Color.....	2
					54
			SECOND SEMESTER		
A-103	Architectural Design, Class C.....	16	A-105	Architectural Design, Class B.....	2
A-115	Freehand Drawing, Class C.....	3	A-107	Architectural Design, Class A.....	19
A-11	History of Architecture.....	6	A-119	Freehand Drawing, Class A.....	3
C-63	Mathematics-Differential Calculus.....	9	A-125	Modeling, Class A.....	2
E-101	Chemistry.....	9	A-134	Professional Ethics and Civic Relations.....	2
A-15	History of Ornament.....	3	C-224	French II.....	9
C-523	Physical Training.....	3	A-144	Theory of Construction C.....	8
C-183	English II.....	6	A-154	Working Drawings and Specifications.....	4
		57	I	Plumbing and Sanitation.....	3
SECOND SEMESTER				Water Color.....	2
A-103	Architectural Design, Class C.....	6			54
A-105	Architectural Design, Class B.....	14	SENIOR YEAR		
A-115	Freehand Drawing, Class C.....	3		FIRST SEMESTER	
A-12	History of Architecture.....	6	A-107	Architectural Design, Class A.....	18
C-54	Mathematics-Integral Calculus.....	9	A-119	Freehand Drawing, Class A.....	2
A-16	History of Ornament.....	3	A-7	History of Painting and Sculpture.....	5
A-138	Perspective.....	7	I	Heating and Ventilating.....	6
C-524	Physical Training.....	3	A-145	Theory of Construction, A.....	8
C-184	English II.....	6	I	Electric Equipment.....	3
		57	A-161	Structural Design.....	4
JUNIOR YEAR			A-157	Working Drawings.....	6
				Water Color.....	2
					54
			SECOND SEMESTER		
A-105	Architectural Design, Class B.....	19	A-107	Architectural Design, Class A.....	19
A-117	Freehand Drawing, Class B.....	3	A-109	Thesis in Design and Construction.....	8
A-123	Modeling, Class B.....	2	A-119	Freehand Drawing, Class A.....	2
A-13	History of Architecture.....	4	A-8	History of Painting and Sculpture.....	5
C-221	French I.....	9	A-146	Theory of Construction, A.....	8
A-141	Theory of Construction, Class C.....	6	A-157	Working Drawings.....	6
A-151	Details of Building Construction.....	3	C-339	Commercial Law.....	6
A-129	Water Color.....	2			54
	Electives (English III, 2-4-6 1 required (Studies in Contem- porary History 2-4-6).....	6			
		54			



COLLEGE OF FINE ARTS



FONDEE LE 27 JANVIER 1877
DECLARÉE LE 12 FÉVRIER 1902

New York, le... January 12, ... 19 22

Groupe Américain
Carnegie Institute of Technology,
Architectural Department,
Pittsburgh, Pa.

Gentlemen:

The gold medal of the Société des Architectes Diplômés par le Gouvernement Français, which was put in the hands of the American Group for award to that institution which shall have most distinguished itself in the year in architectural teaching, according to Beaux Arts principles, has been awarded for the season 1920-21 to

THE CARNEGIE INSTITUTE OF TECHNOLOGY

Allow me to offer you, for our Group, our congratulations on the really excellent results of the serious work shown by your students.

As usual the results shown by the competitions held by the Beaux Arts Institute of Design have been used as a basis. The five silver medals for award to individual students who have shown the highest standard therein have been awarded to the following students.

R.A. Fisher	"T" Square Club
A.E. Westover, Jr.,	"T" Square Club
R.F. Larson,	University of Pennsylvania
R.B. Thomas,	Yale University
B. Dierks,	Carnegie Inst. of Tech.

Results in work of the first class were shown this year by the following Institutions.

Carnegie Inst. of Technology	Pennsylvania State College
Columbia University	Syracuse University
Cornell University	University of Kansas
Chicago School of Architecture	University of Pennsylvania
Harvard University	University of Texas
John Huntington Poly. Inst.	University of Virginia
Mass. Inst. of Technology	Yale University

Yours very truly,

American Group
Société des Architectes Diplômés
by JOHN MEAD HOWELLS

COMMITTEE:

Messrs. Lloyd Warren
Edwin H. Denby 367 Lexington Avenue, New York City. President
Jas. Gamble Rogers
Wm.A. Delano
Jos.H. Freedlander
John M. Howells



LE BRUN TRAVELING
SCHOLARSHIP 1923



Prize Design

A MUSEUM

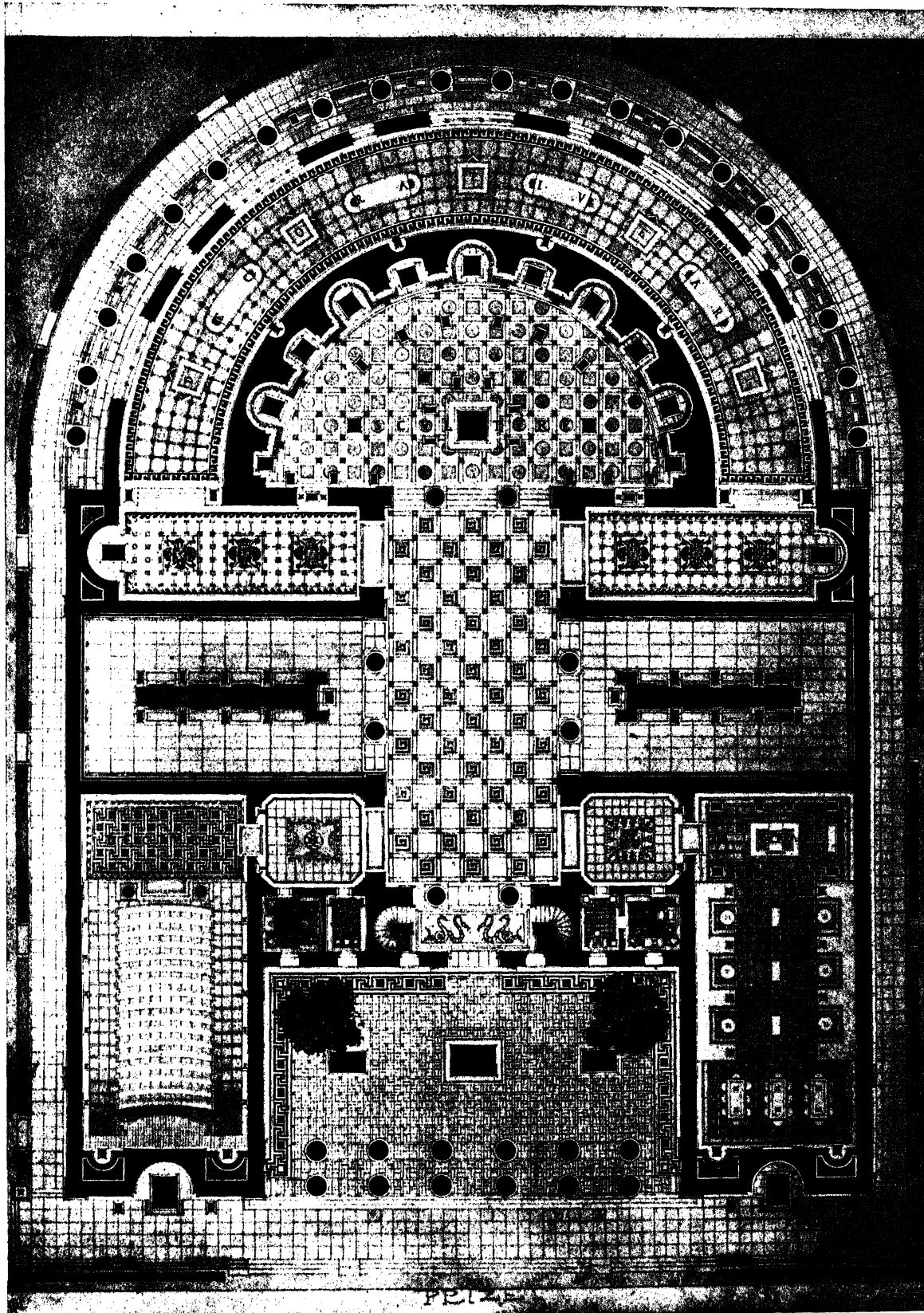
PAUL F. SIMPSON

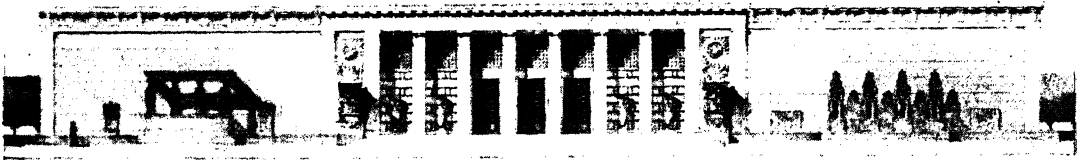


LE BRUN TRAVELING
SCHOLARSHIP 1923

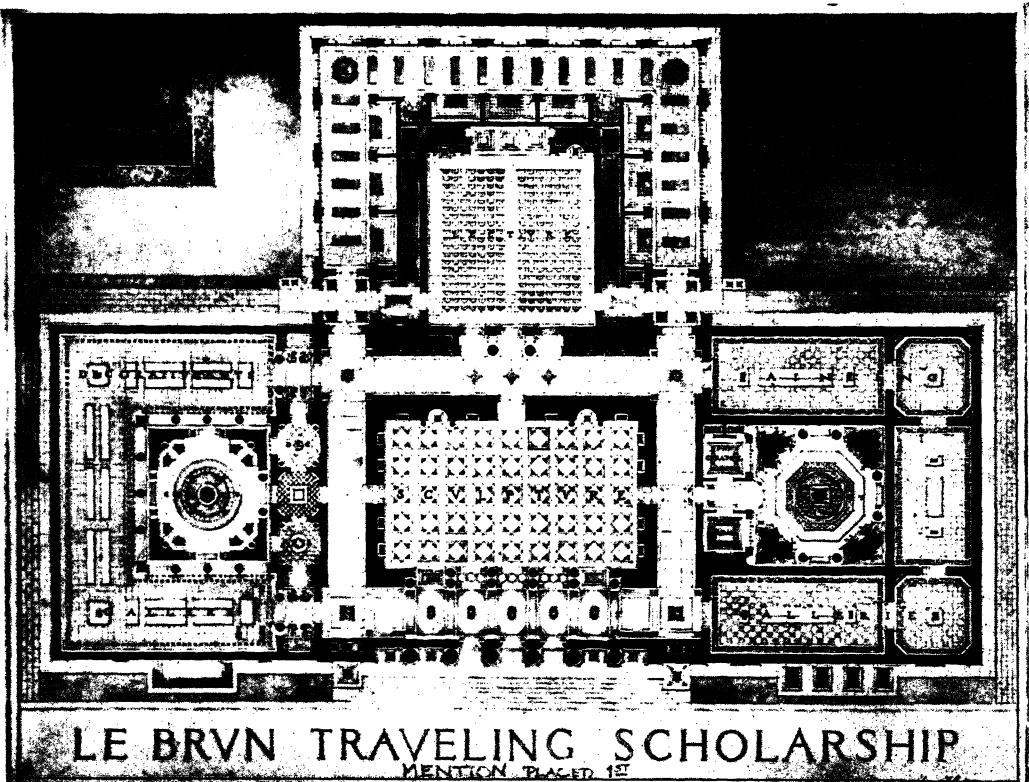


PAUL F. SIMPSON





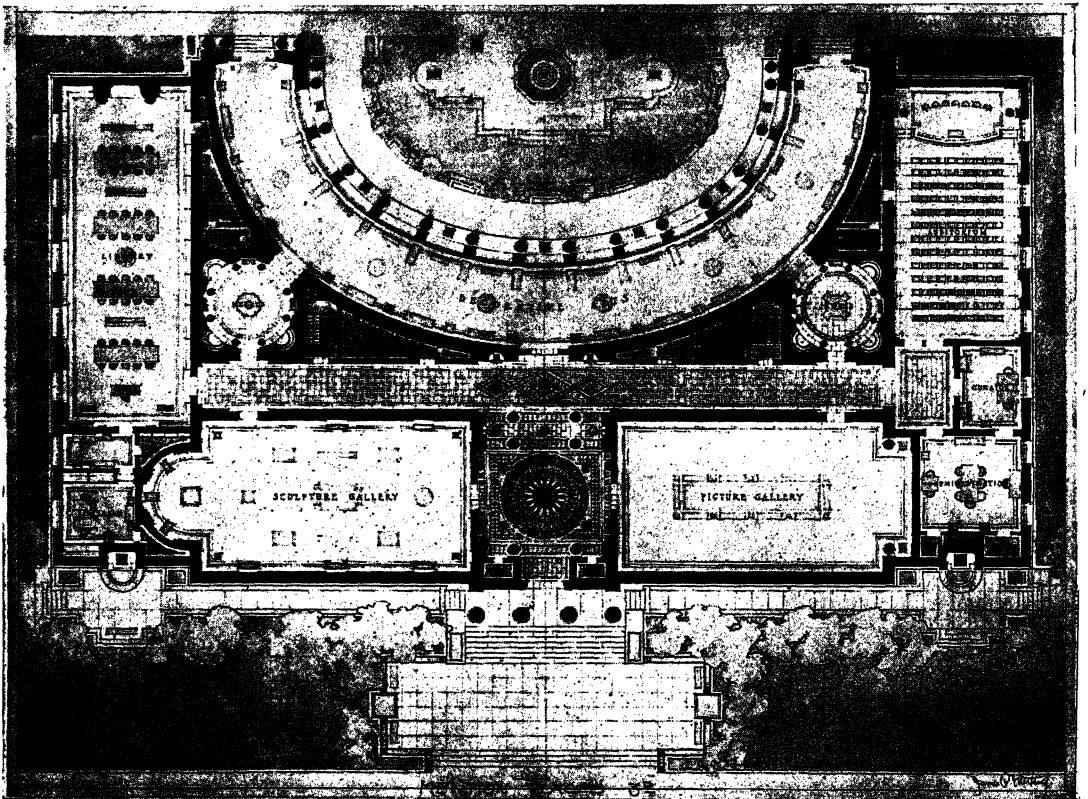
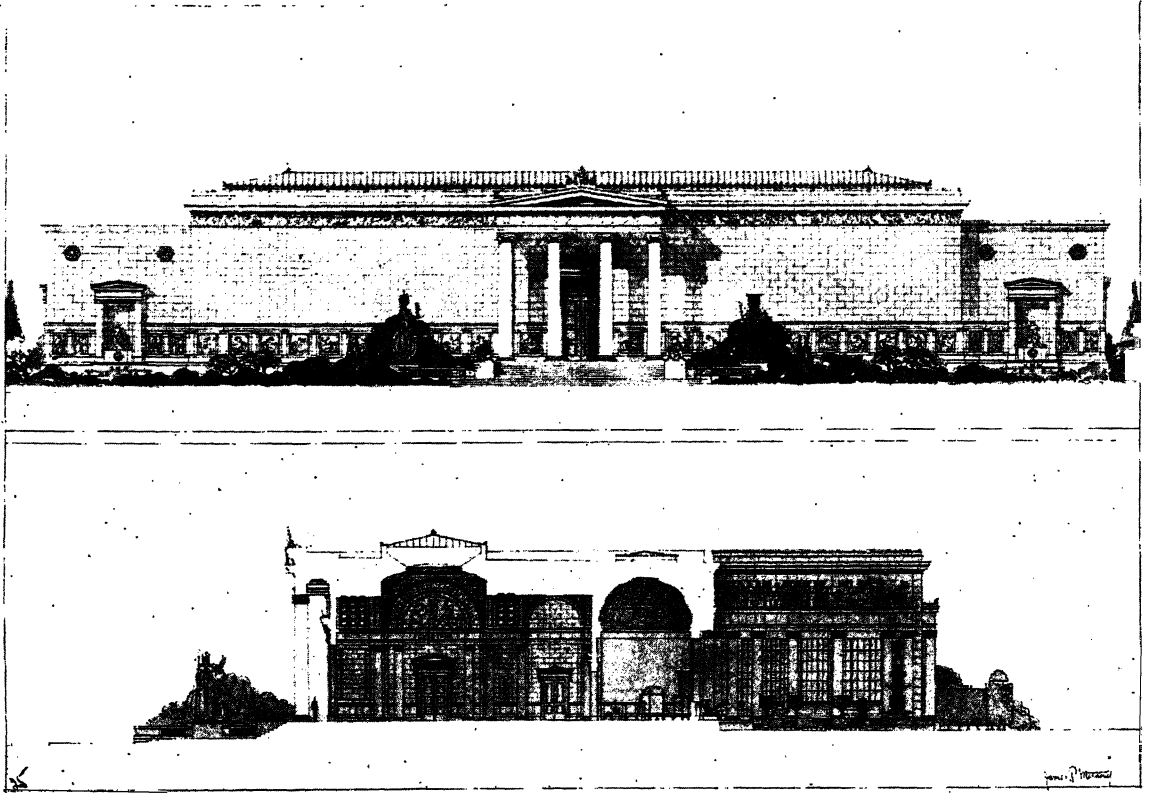
LE BRVN TRAVELING SCHOLARSHIP



Mention Placed First

A MUSEUM

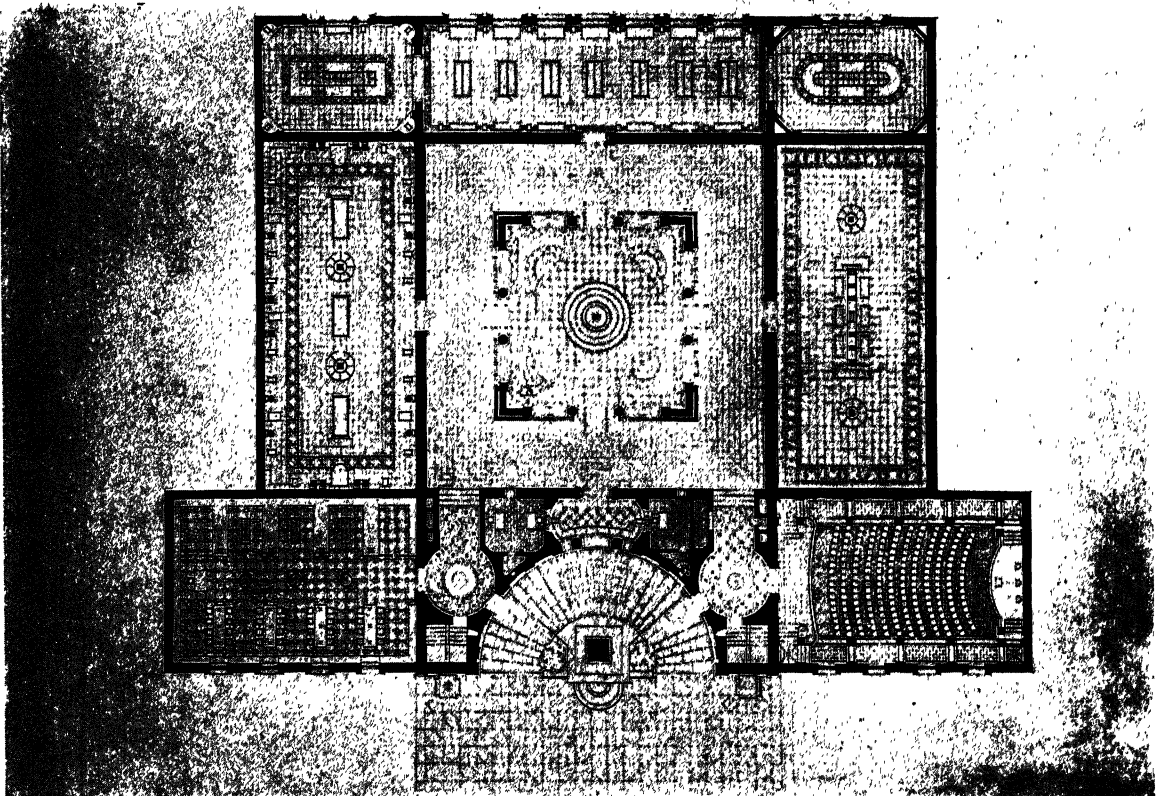
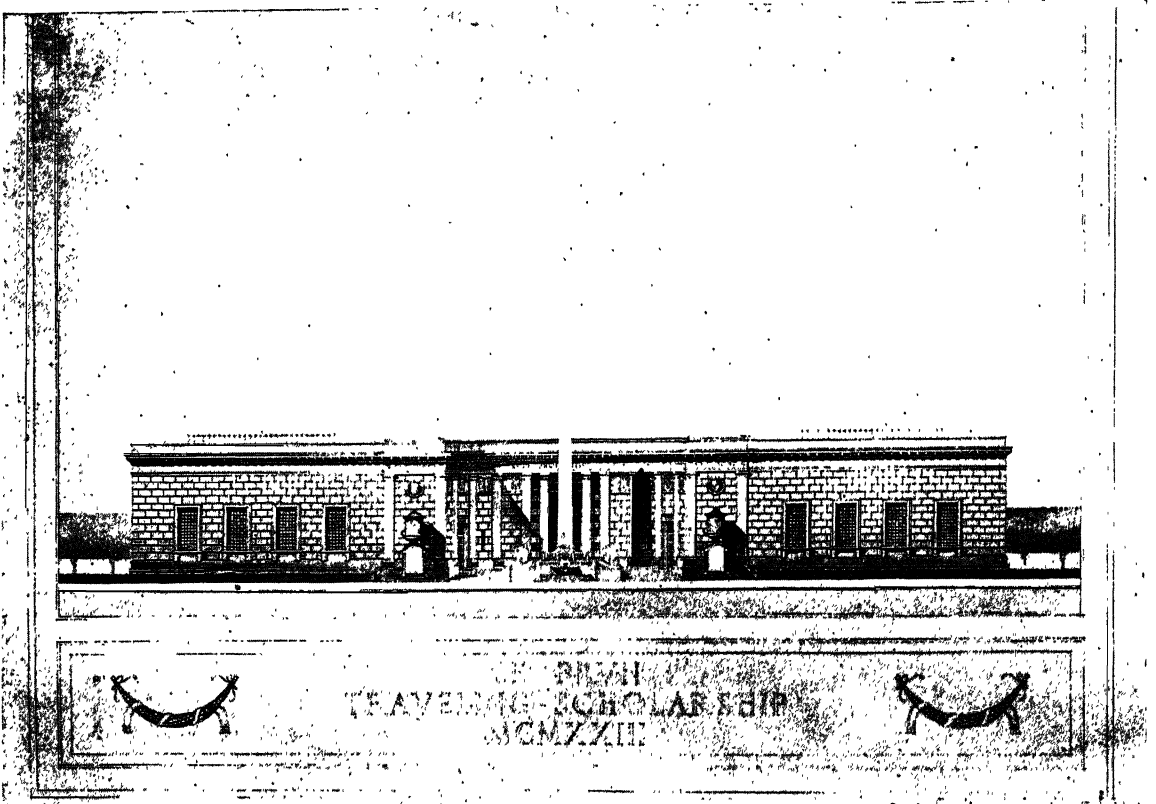
G. N. PAULY



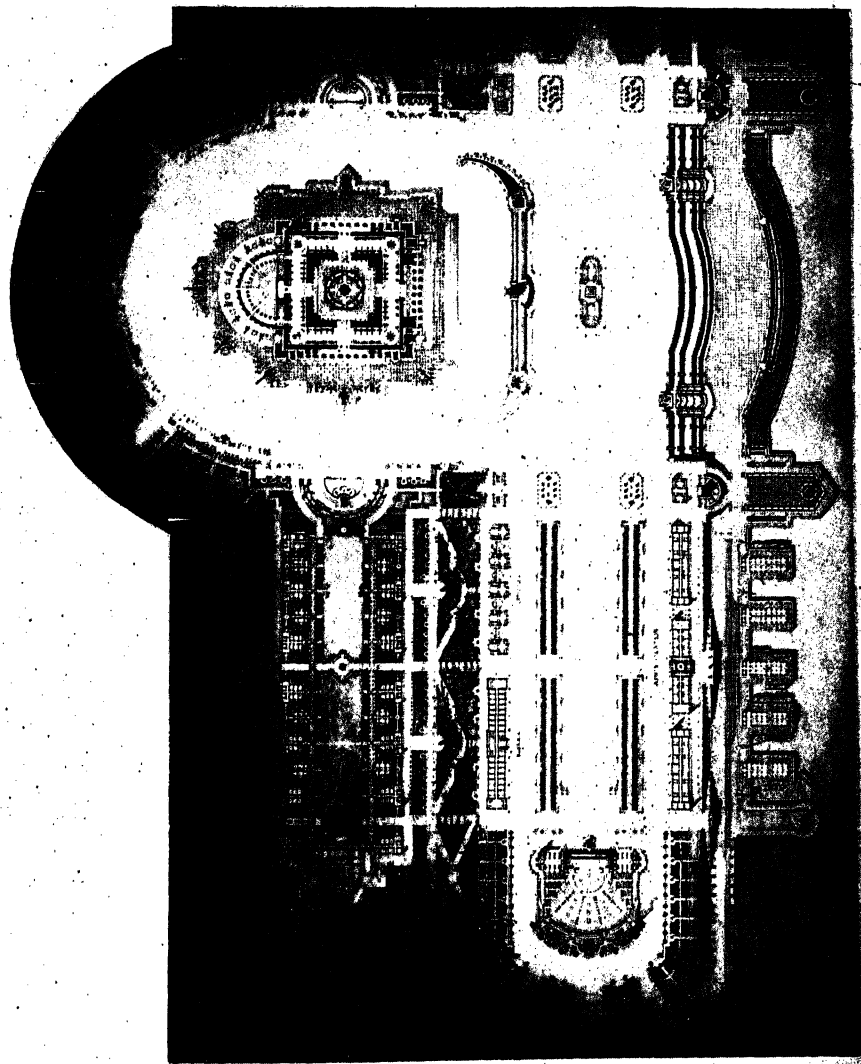
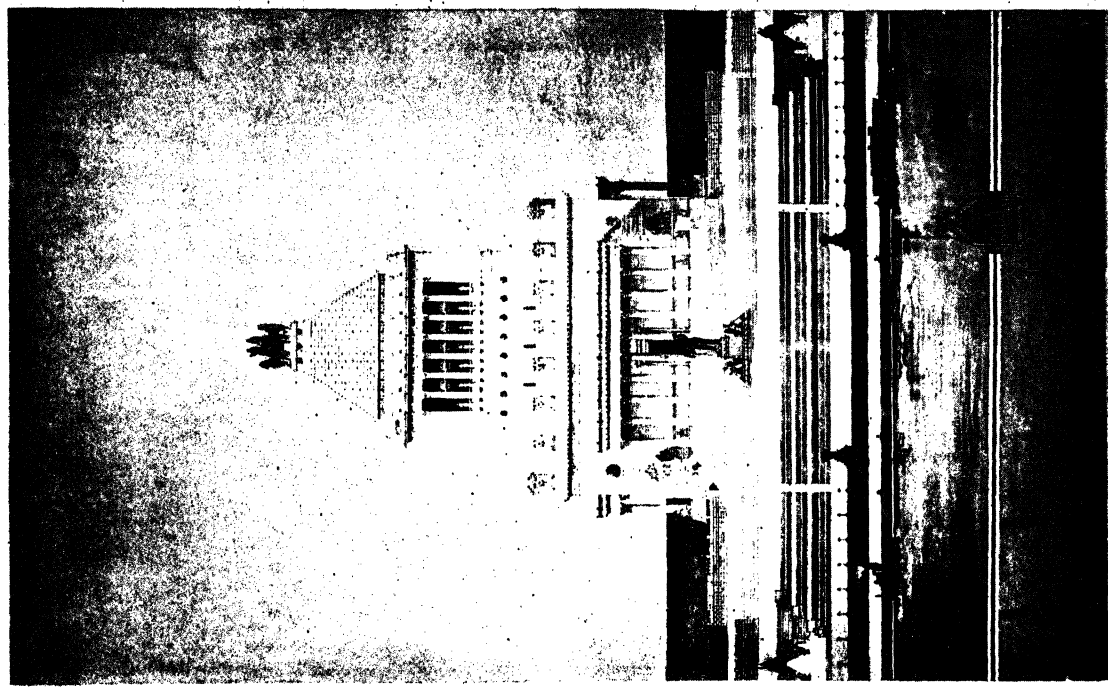
Mention Placed Third

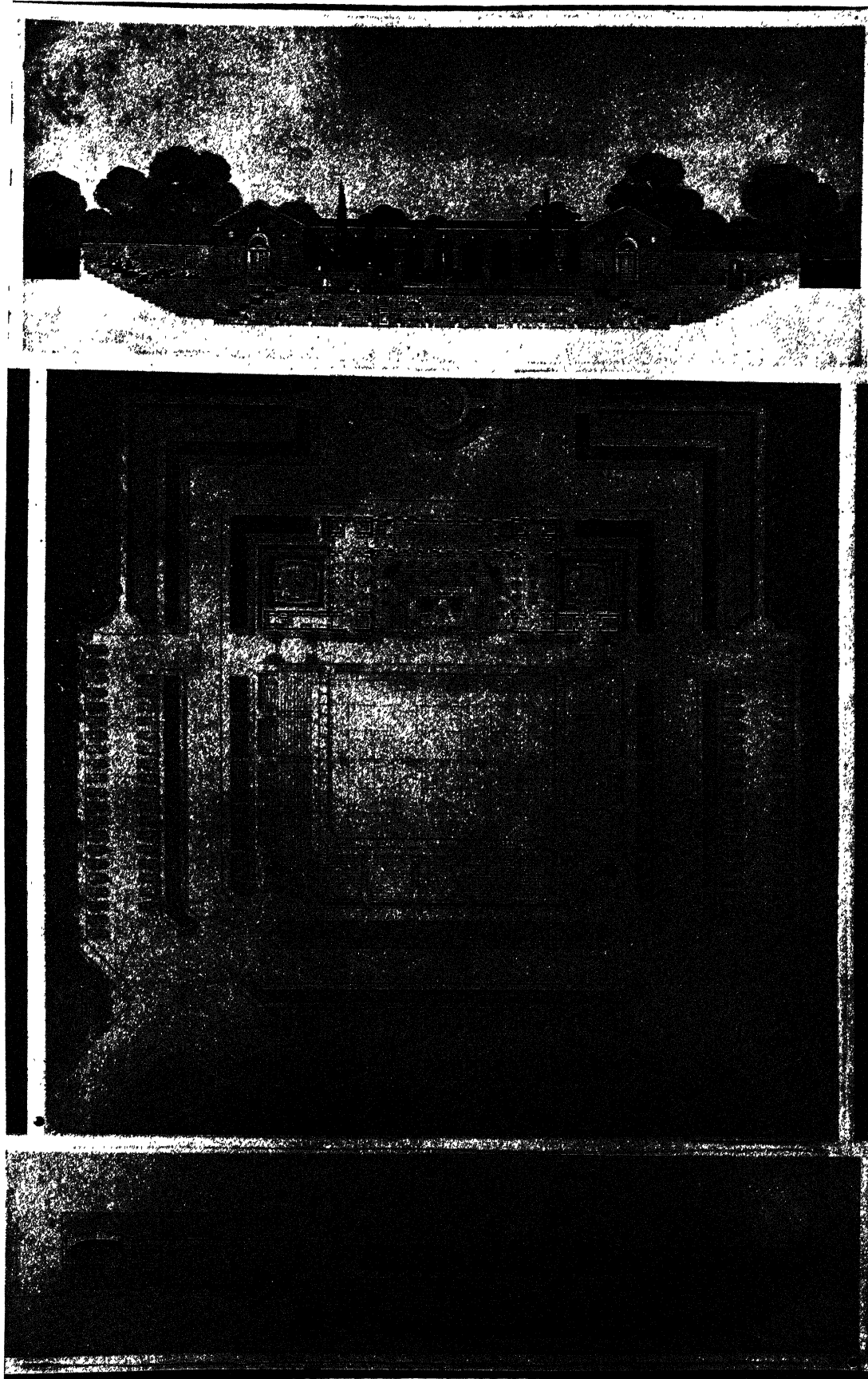
JAMES P. METHENY

LE BRUN TRAVELING SCHOLARSHIP—1923



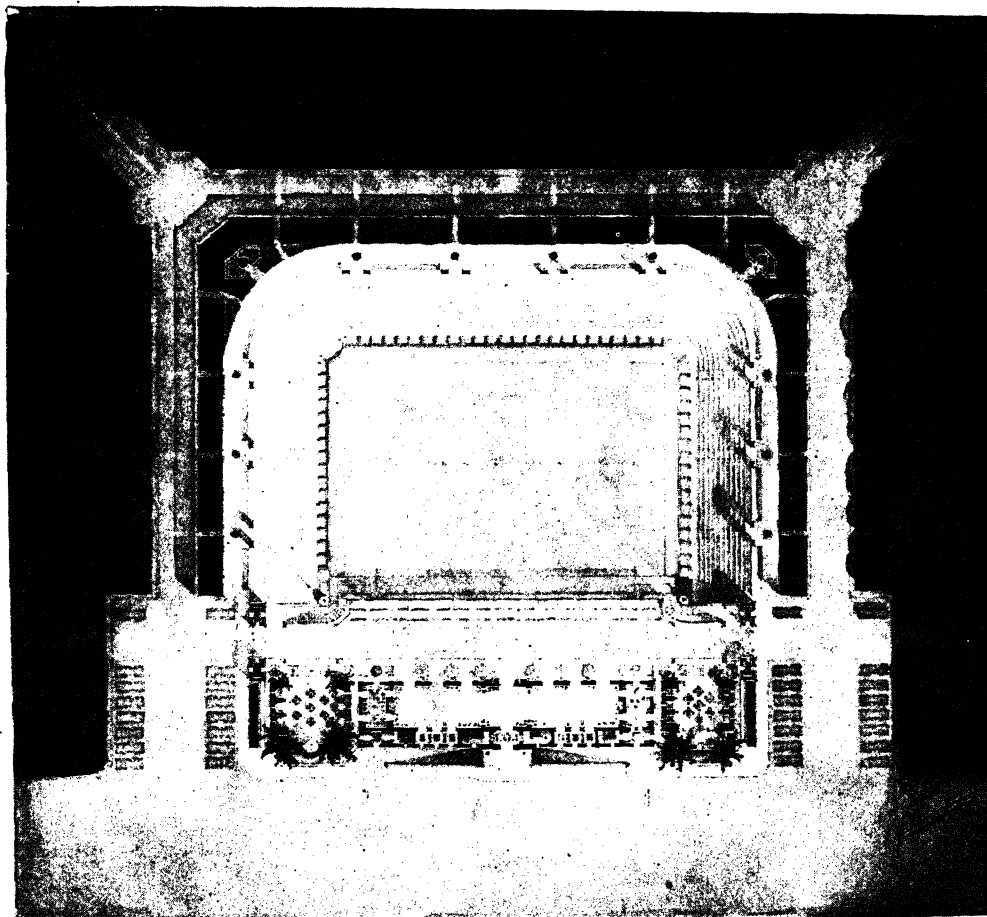
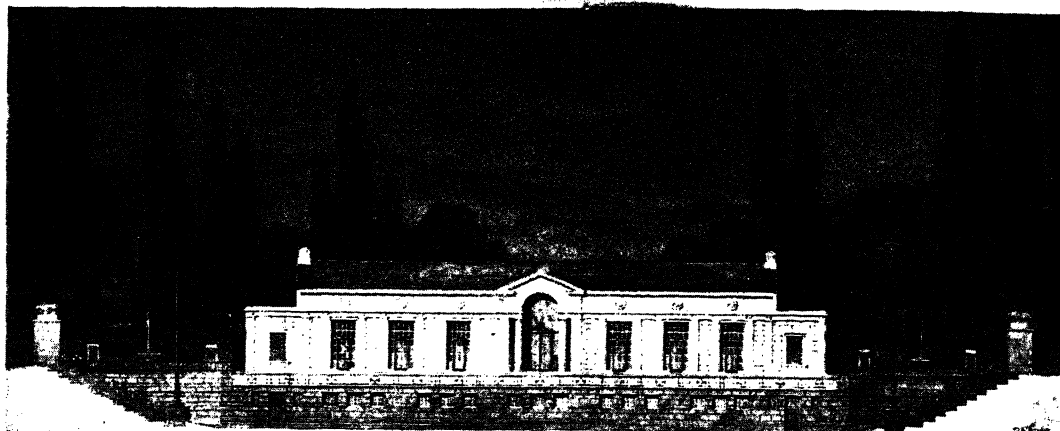
STEWARDSON SCHOLARSHIP PRIZE DESIGN—1916





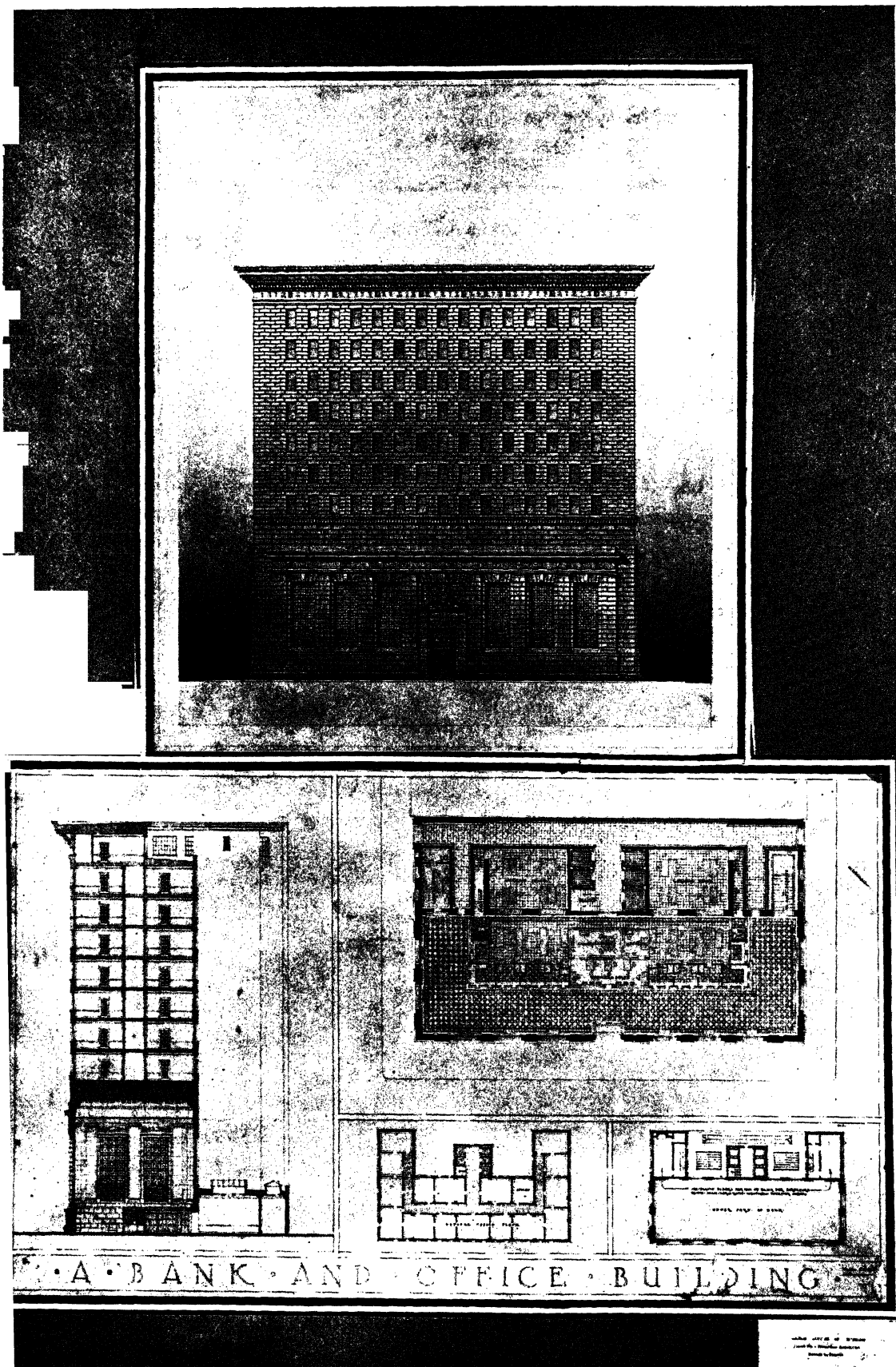
A TENNIS CLUB

OTTO M. OLSON



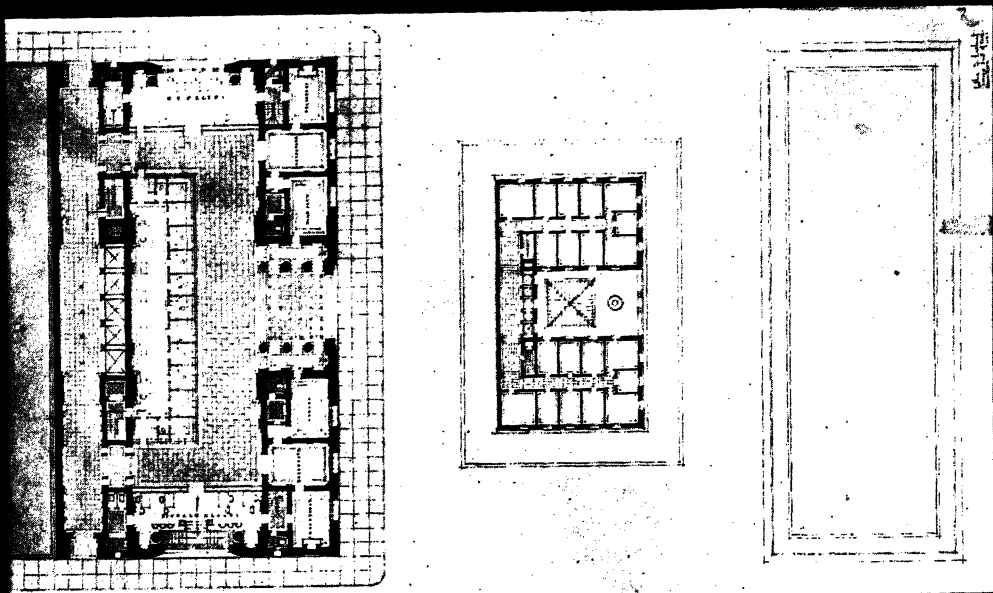
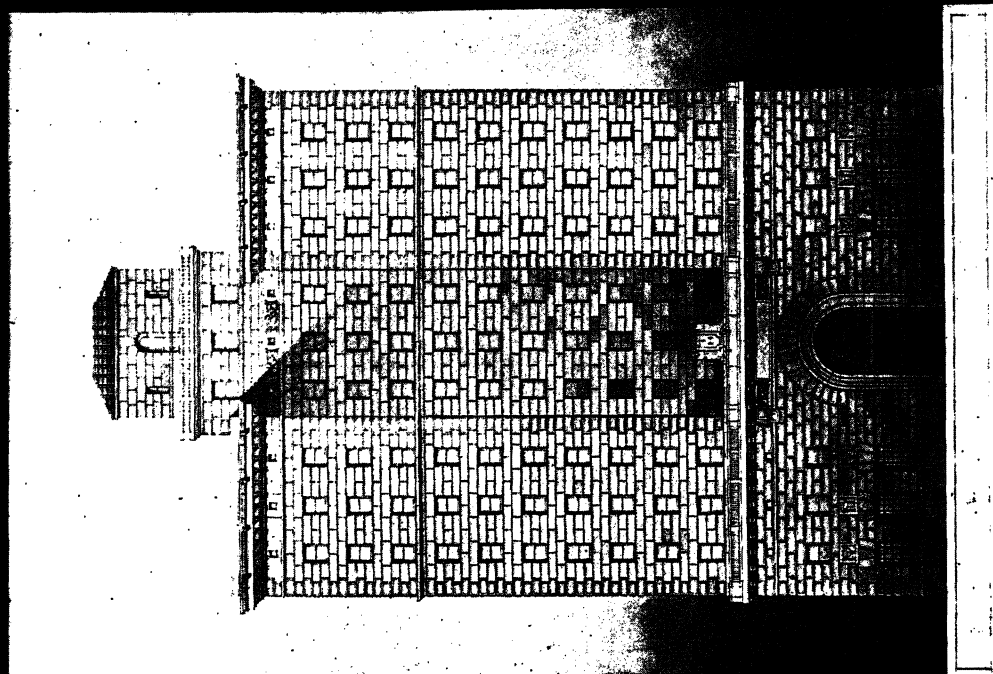
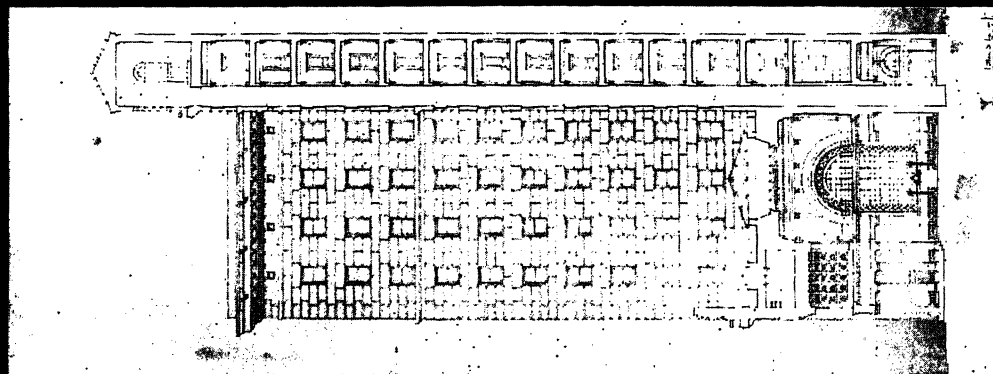
A TENNIS CLUB

G. N. PAULY



A BANK AND OFFICE BUILDING

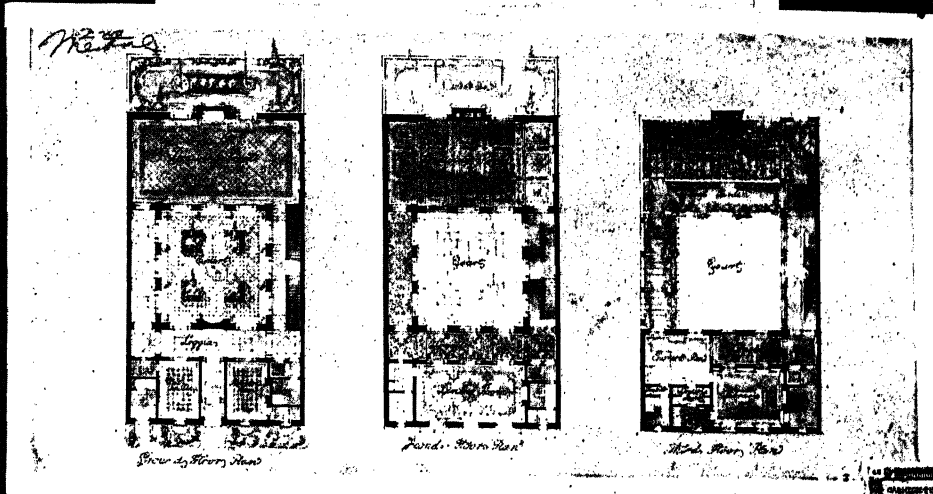
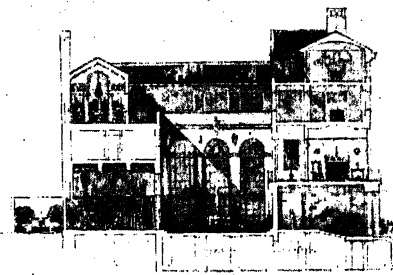
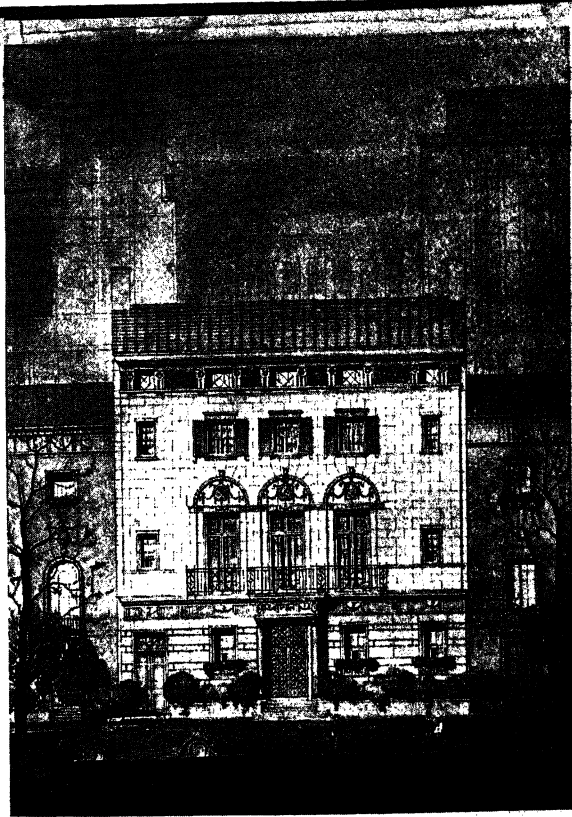
RUSSEL S. SIMPSON



A BANK AND OFFICE BUILDING

LUTHER S. LASHMIT

BEAUX ARTS COMPETITIONS

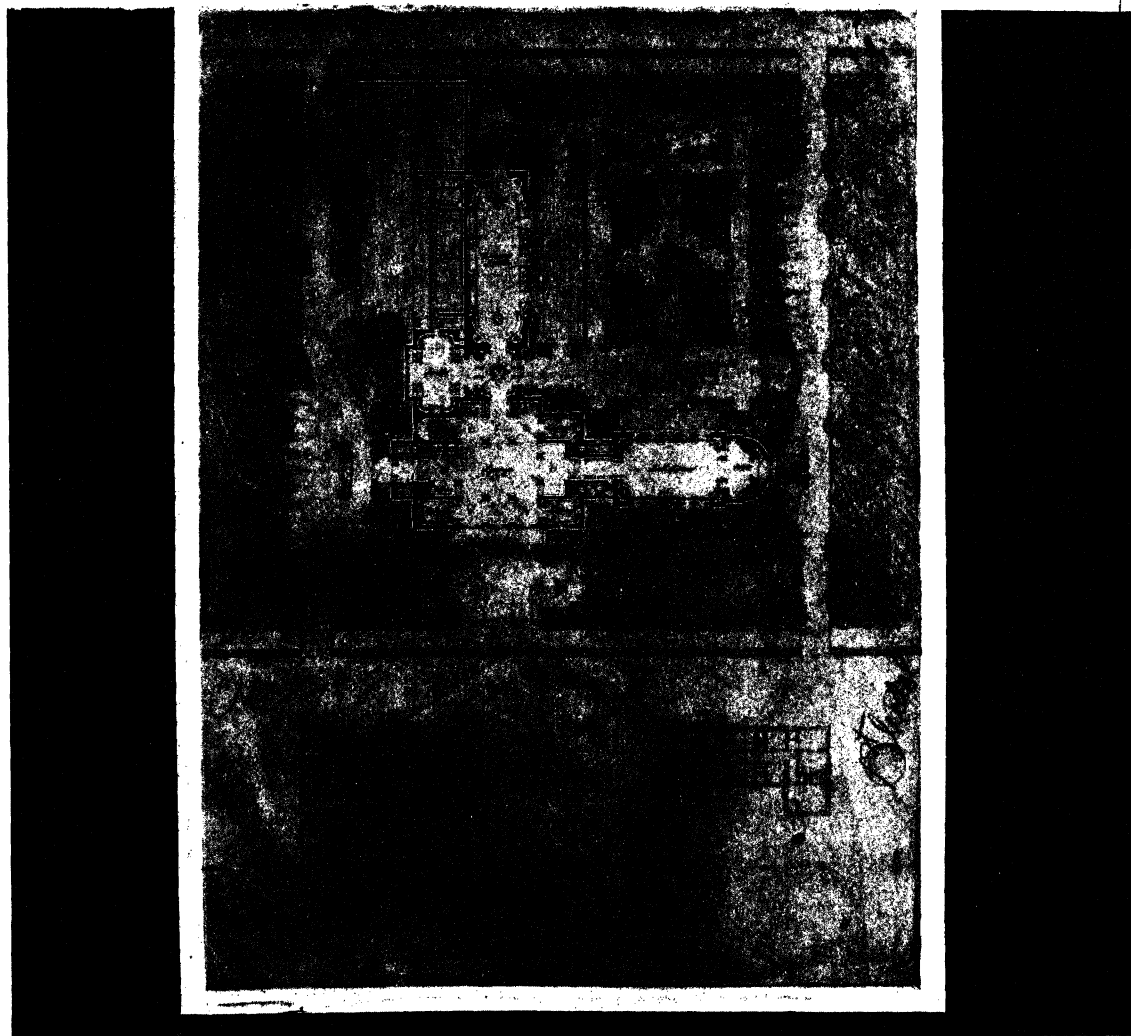
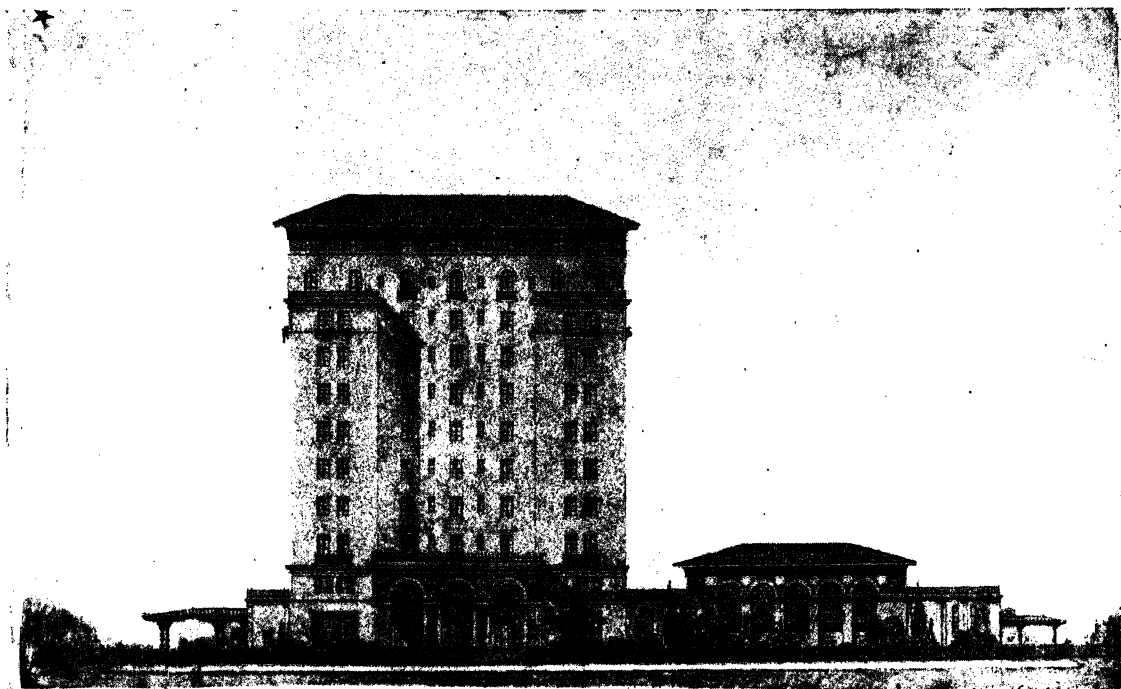


Second Medal

A BATCHELOR'S CITY HOUSE

G. N. PAULY

BEAUX ARTS COMPETITIONS

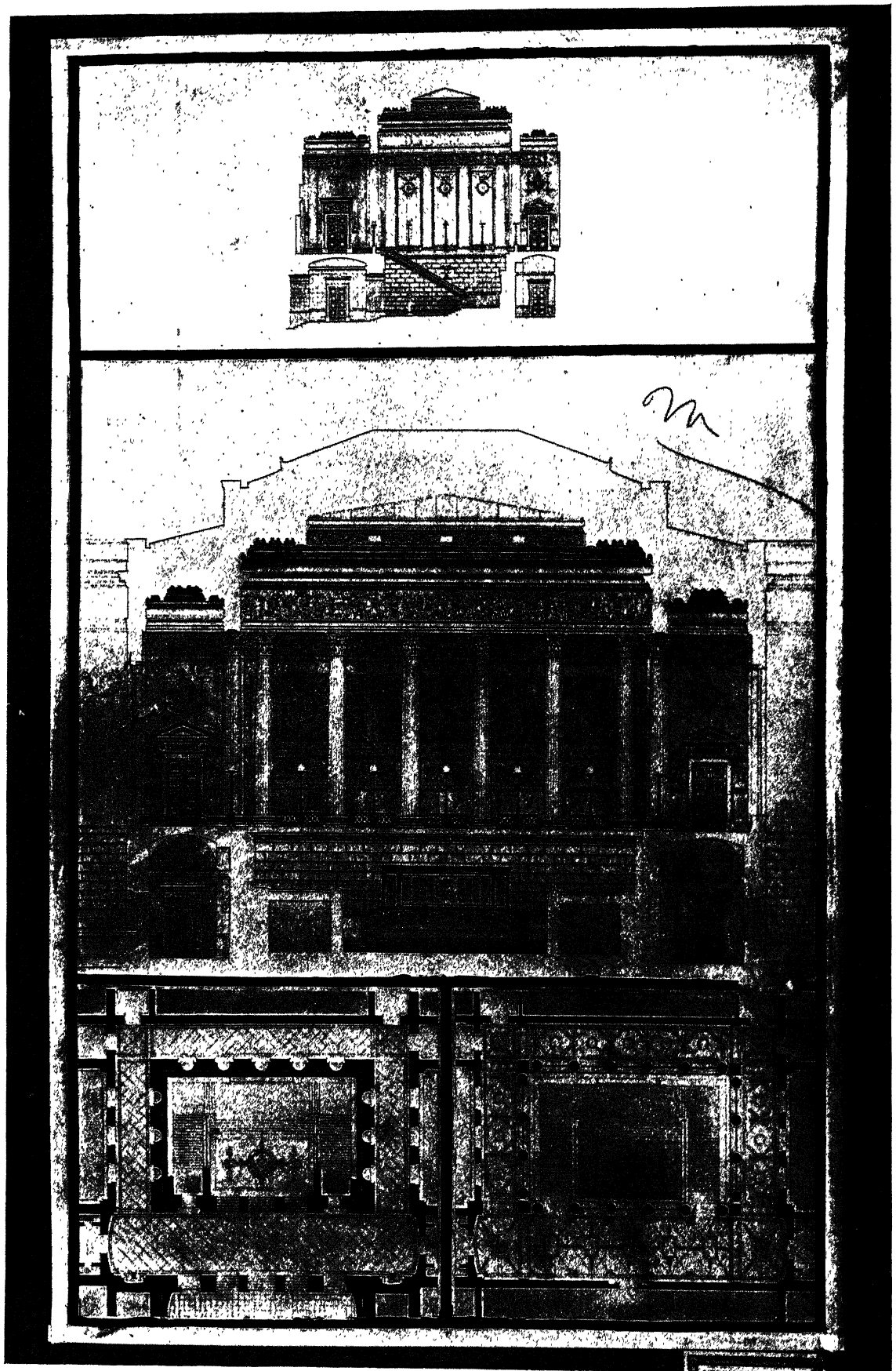


First Medal

A HOTEL IN A SMALL TOWN

JAMES P. METHENY

BEAUX ARTS COMPETITIONS

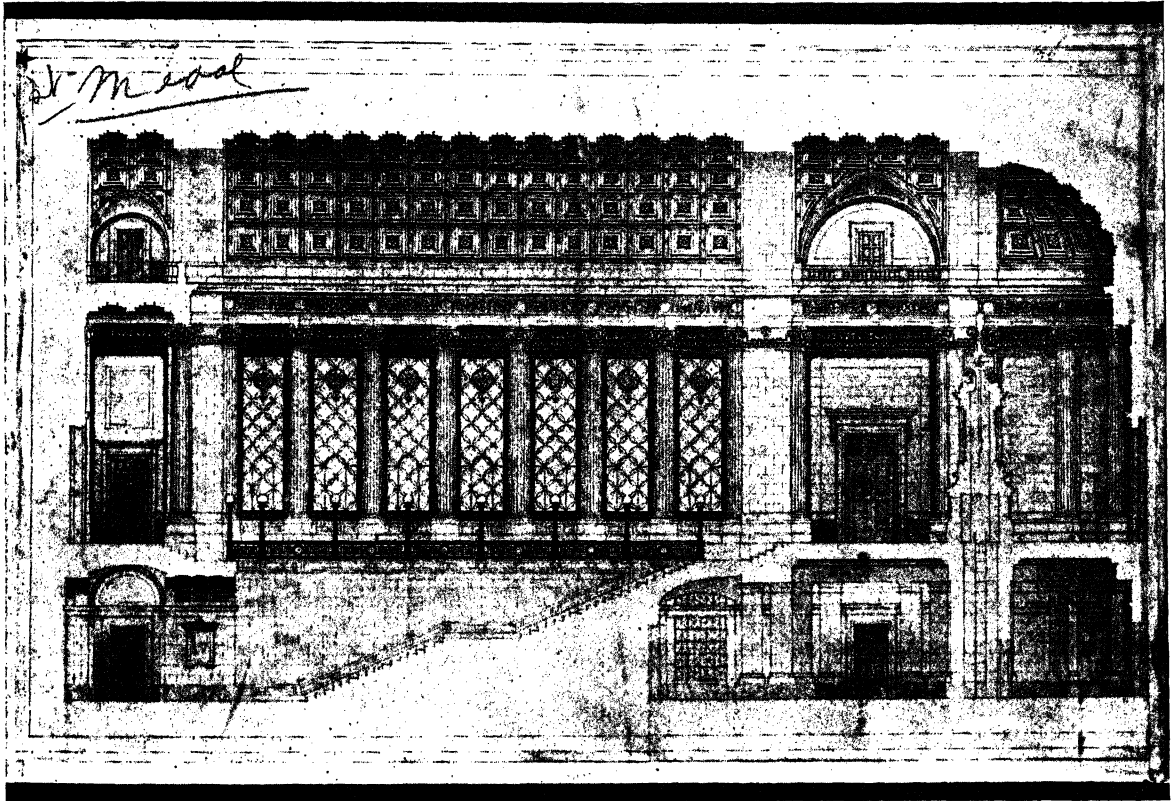


Second Medal

A STAIRCASE HALL

PAUL F. SIMPSON

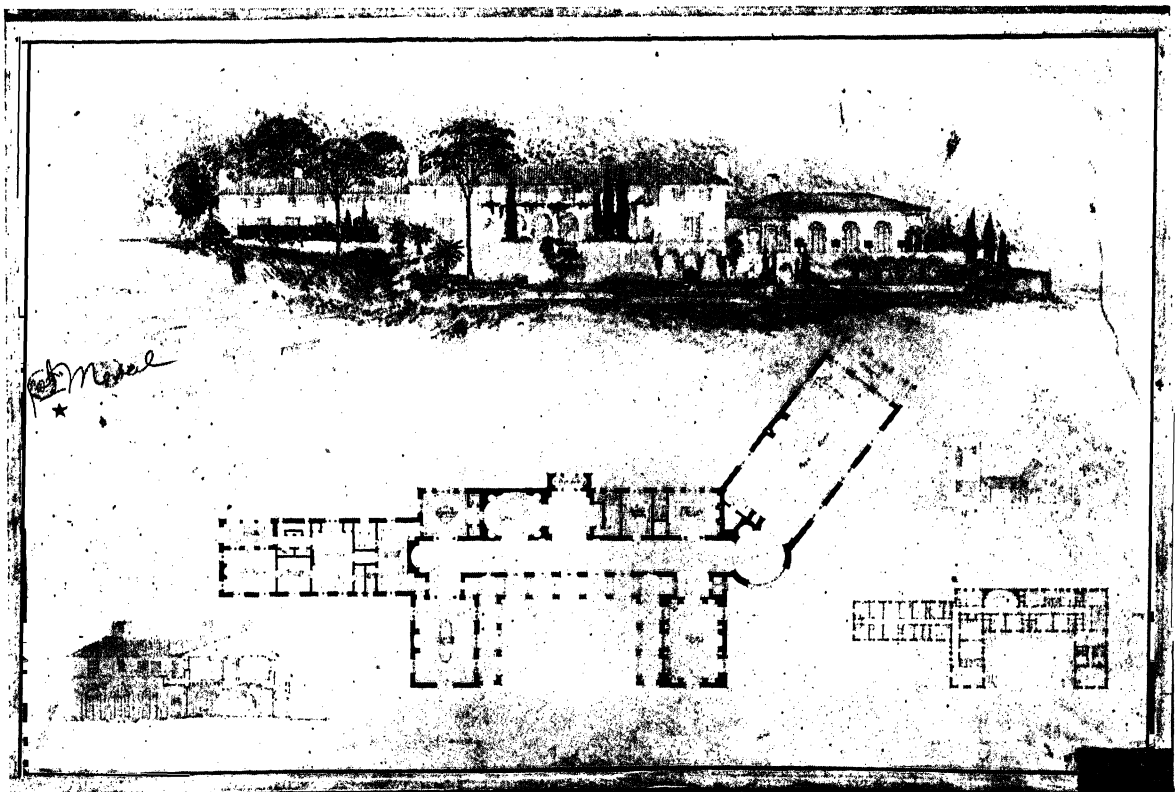
BEAUX ARTS COMPETITIONS



First Medal

A STAIRCASE HALL

LUTHER S. LASHMIT

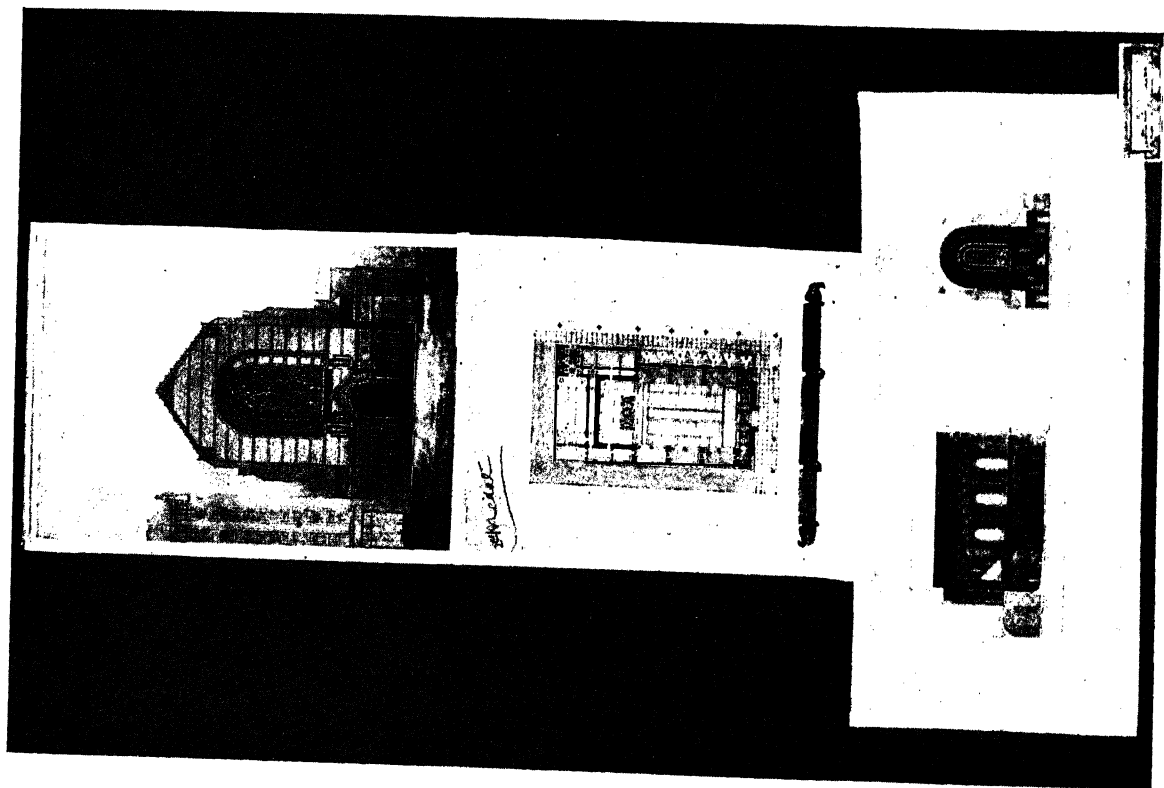


First Medal

A COUNTRY HOUSE

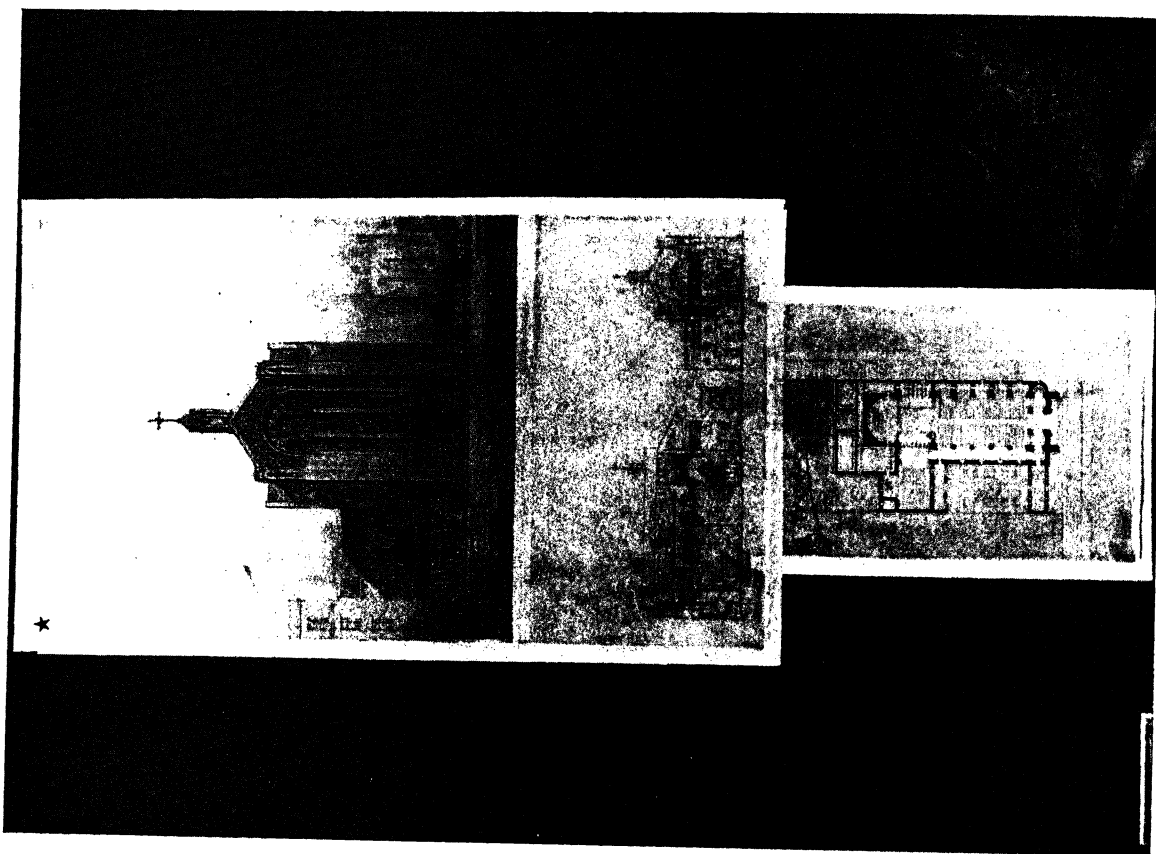
FRANK DRAZ

BEAUX ARTS COMPETITIONS



Second Medal

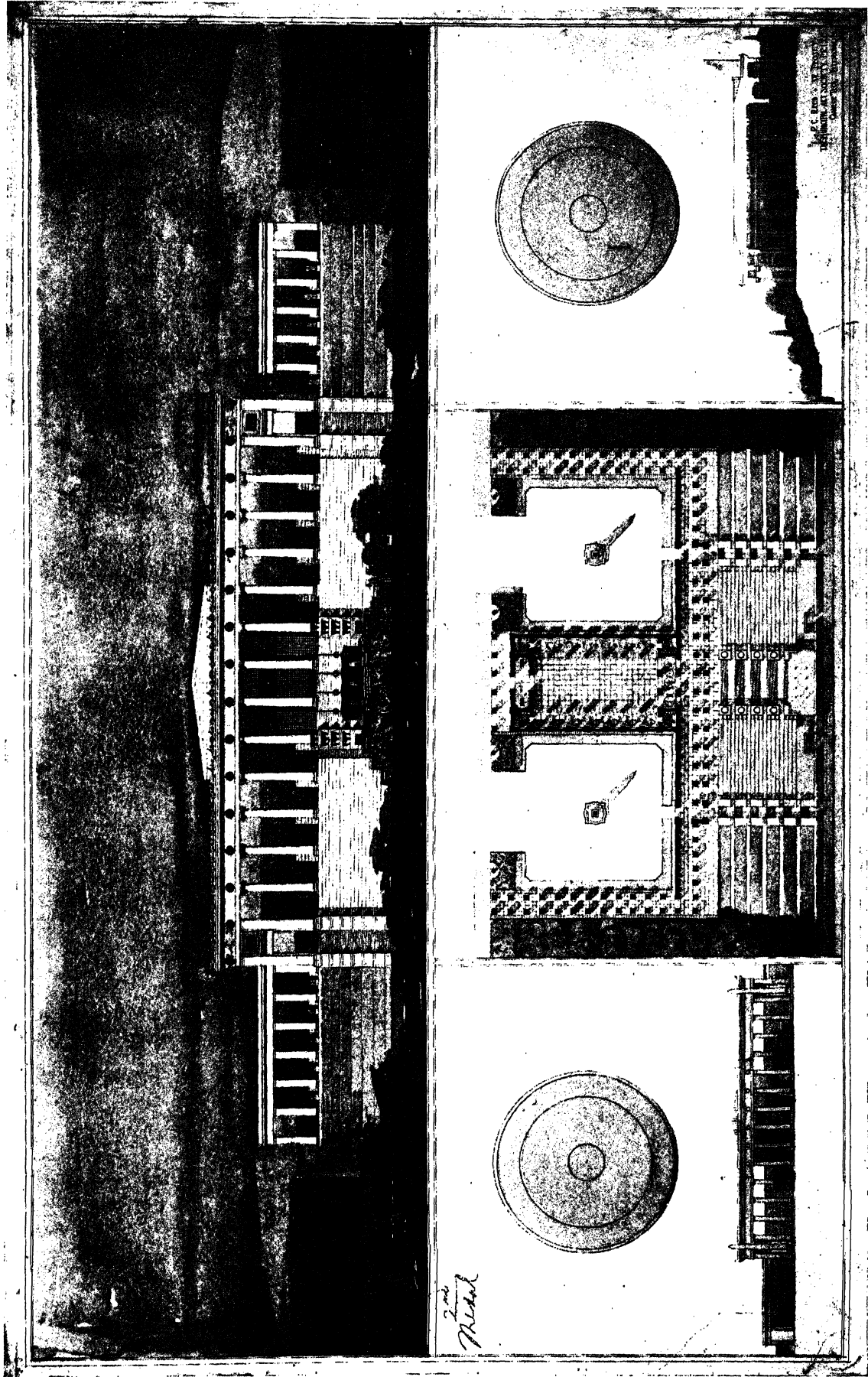
G. N. PAULY
AN EPISCOPAL CHURCH



First Medal
AN EPISCOPAL CHURCH

PAUL F. SIMPSON

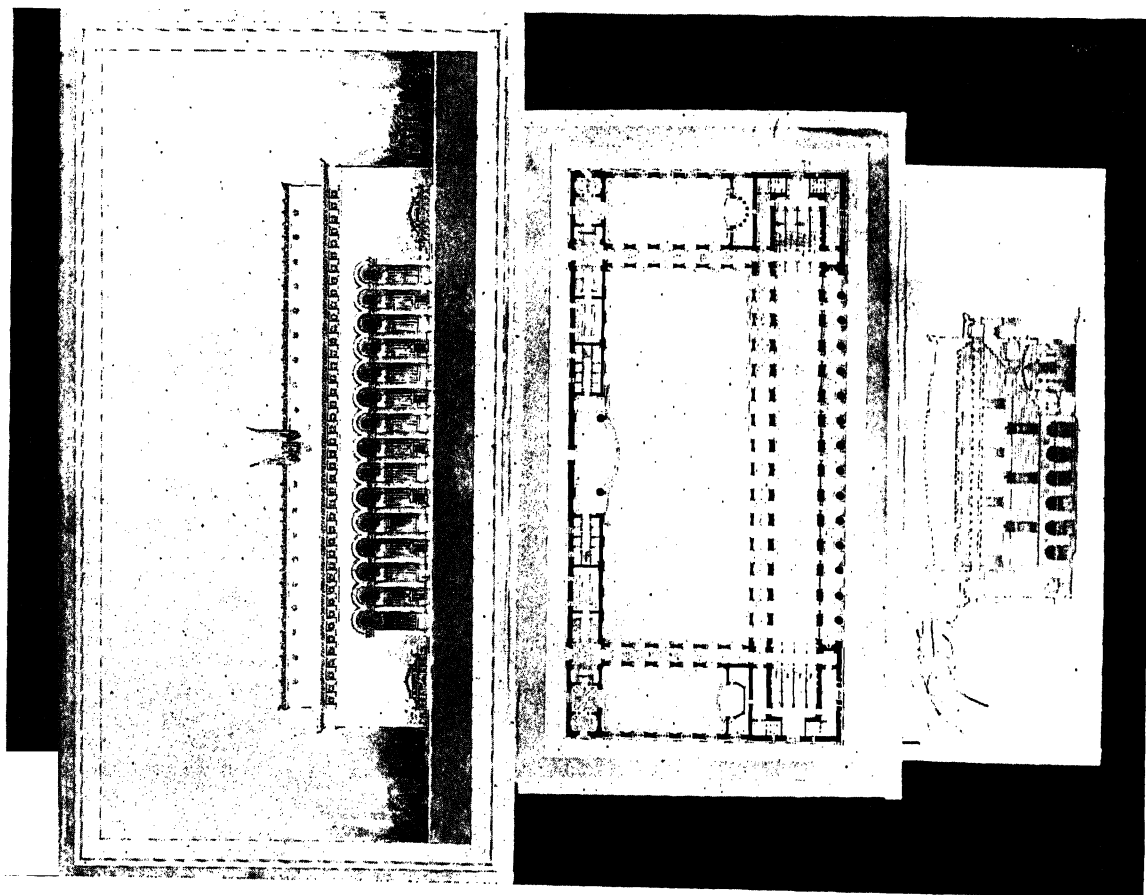
THE MUNICIPAL ART SOCIETY COMPETITION—1923



Second Medal

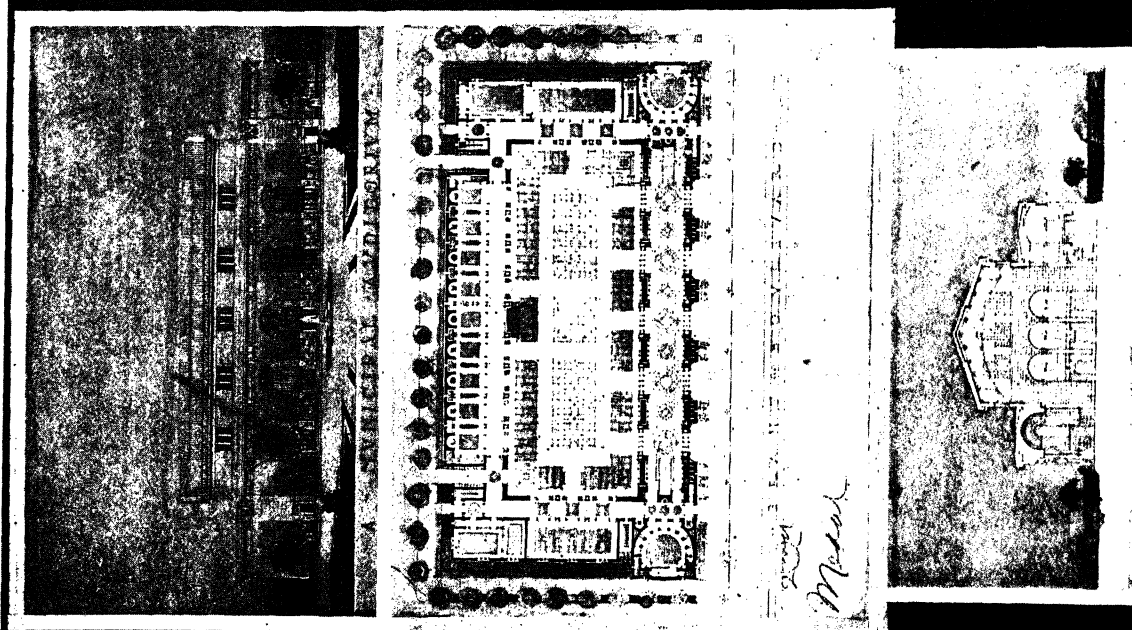
A REVIEWING STAND

PAUL C. REED



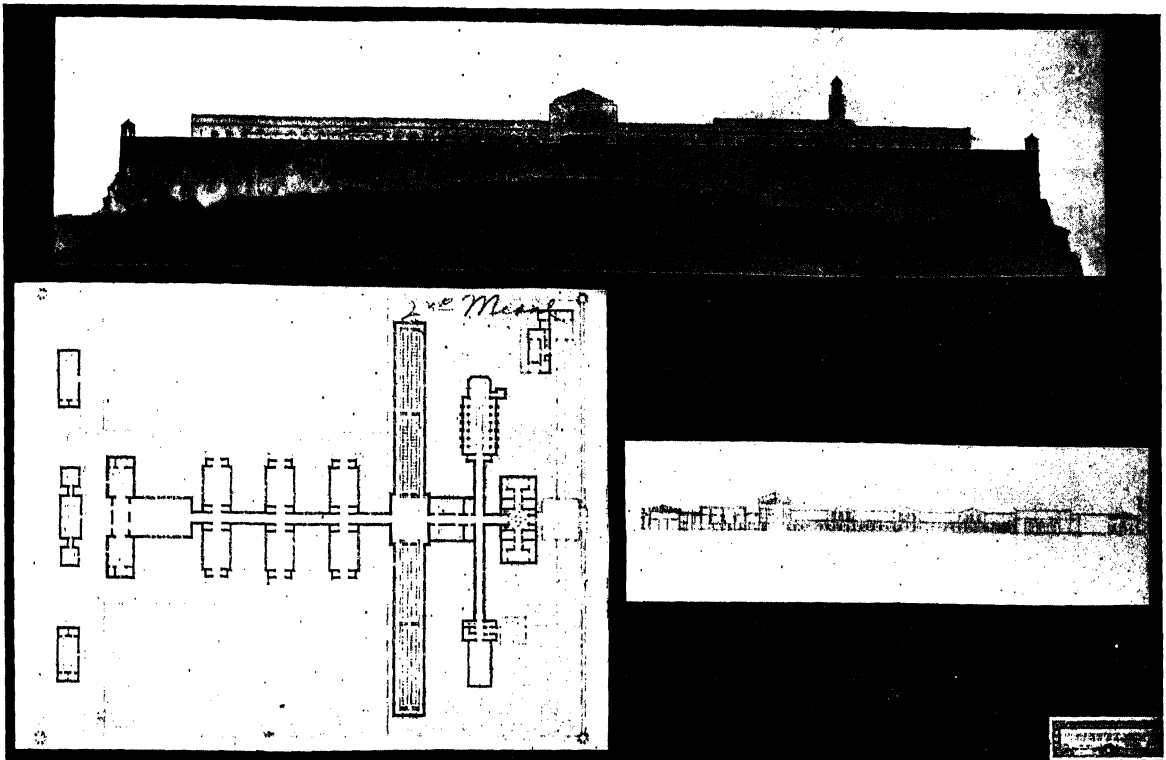
Second Medal

C. W. HUNT Second Medal
A MUNICIPAL AUDITORIUM



C. H. SORBER

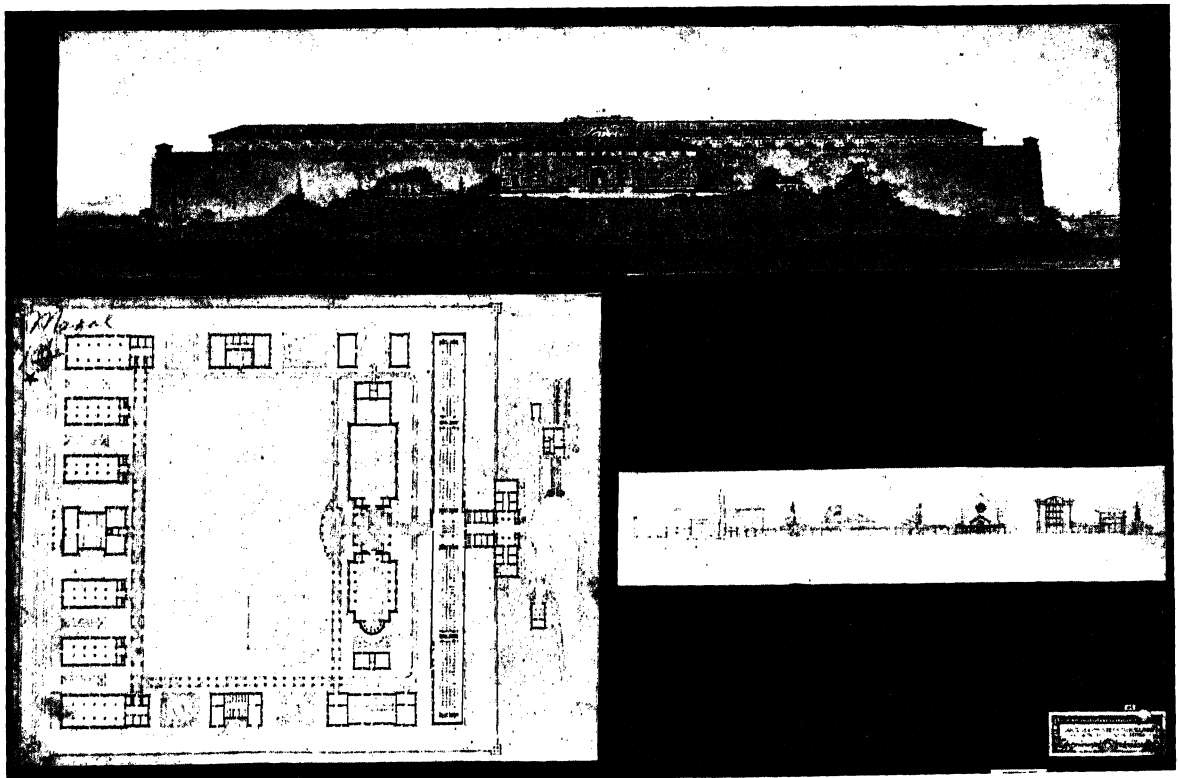
BEAUX ARTS COMPETITIONS



Second Medal

A PENITENTIARY

C. B. MARKS

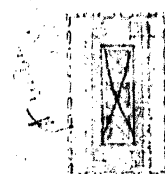
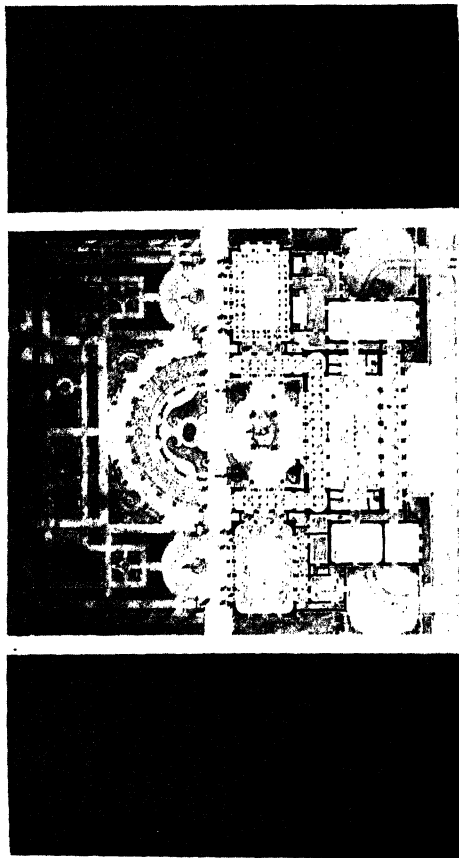
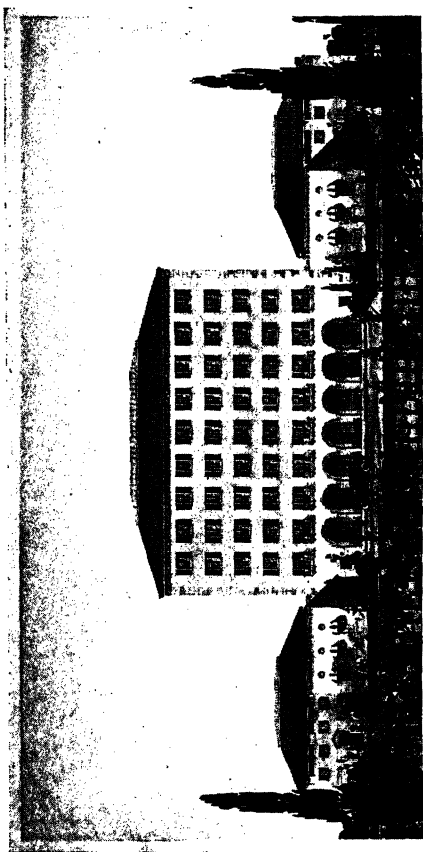


First Medal

A PENITENTIARY

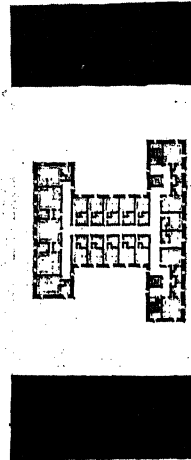
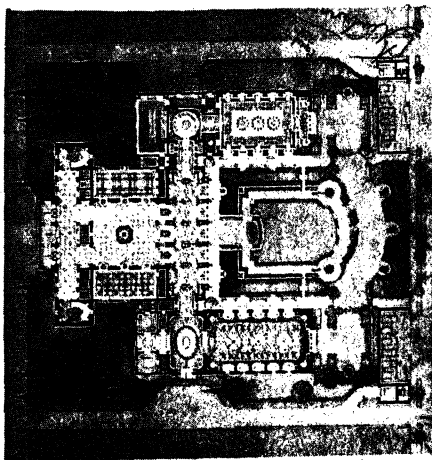
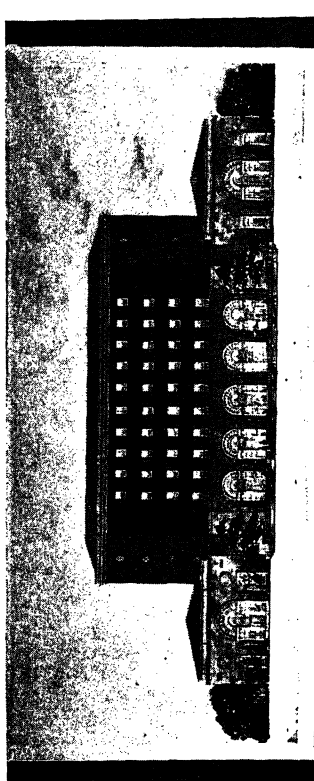
L. NAUSBAUM

BEAUX ARTS COMPETITIONS



First Mention

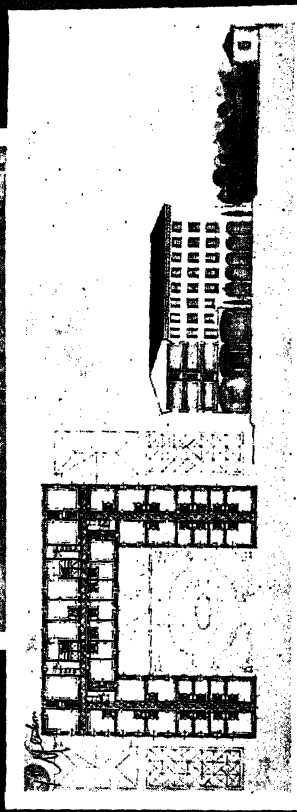
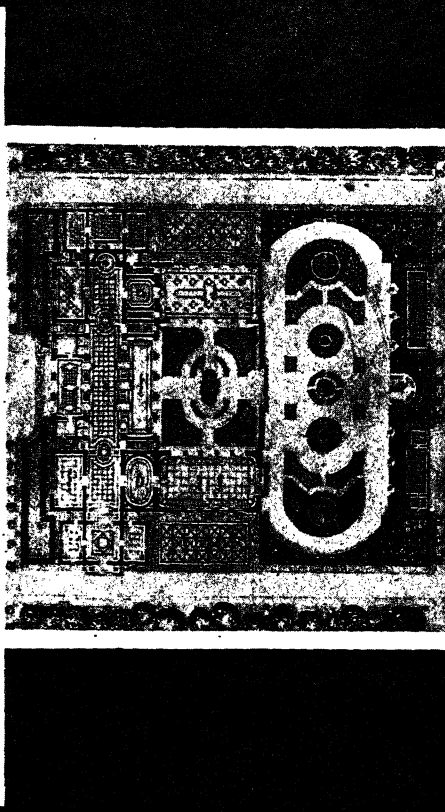
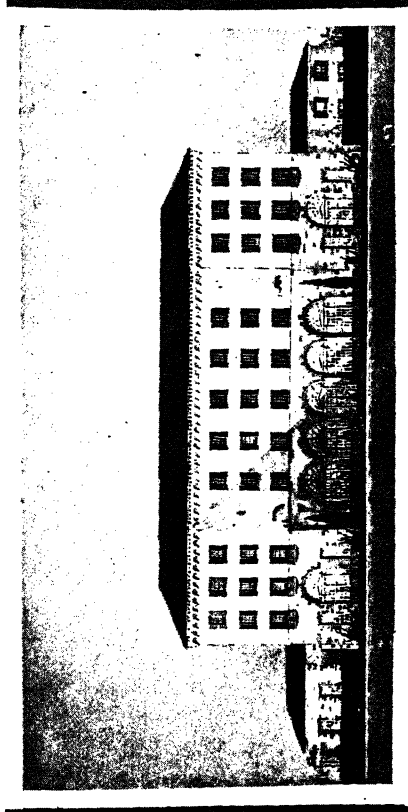
Rody Patterson
A HOTEL IN A SMALL TOWN



First Mention
A HOTEL IN A SMALL TOWN

J. N. FRANKLIN

BEAUX ARTS COMPETITIONS

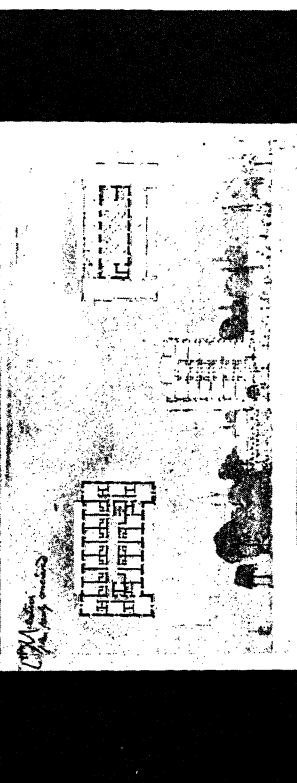
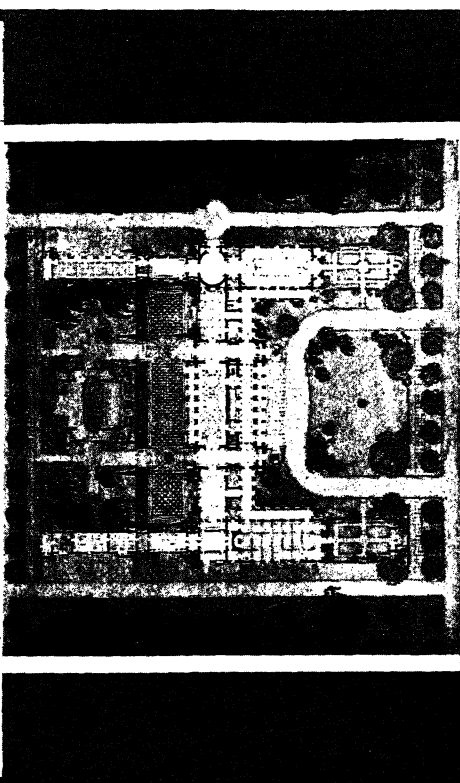
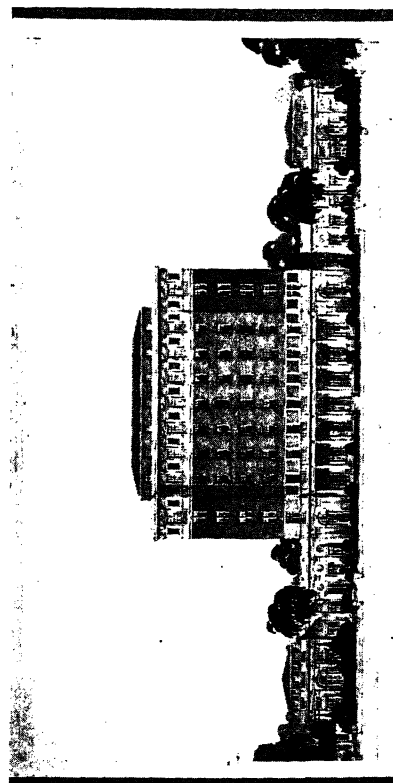


First Mention

V. H. Sraomquist

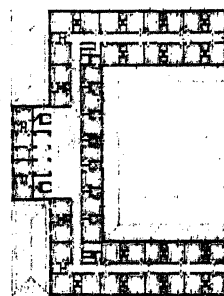
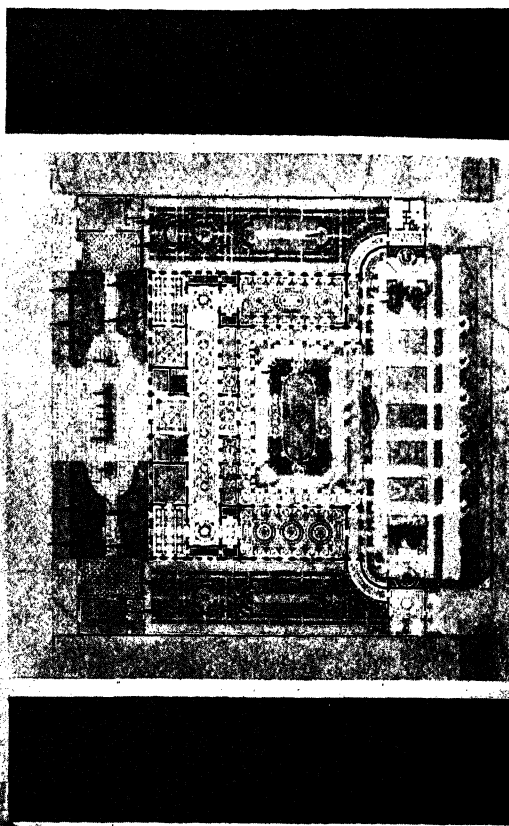
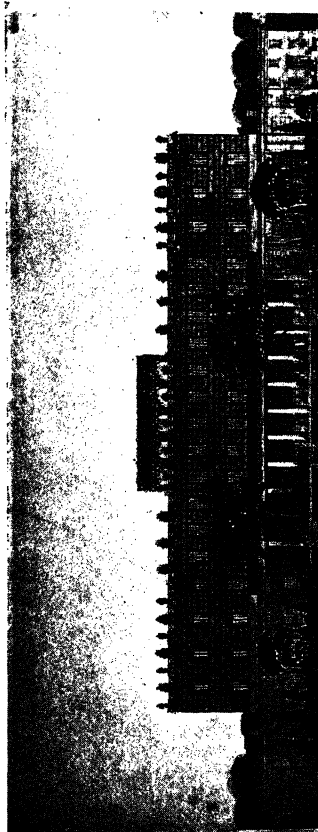
First Mention

HOTEL IN A SMALL TOWN



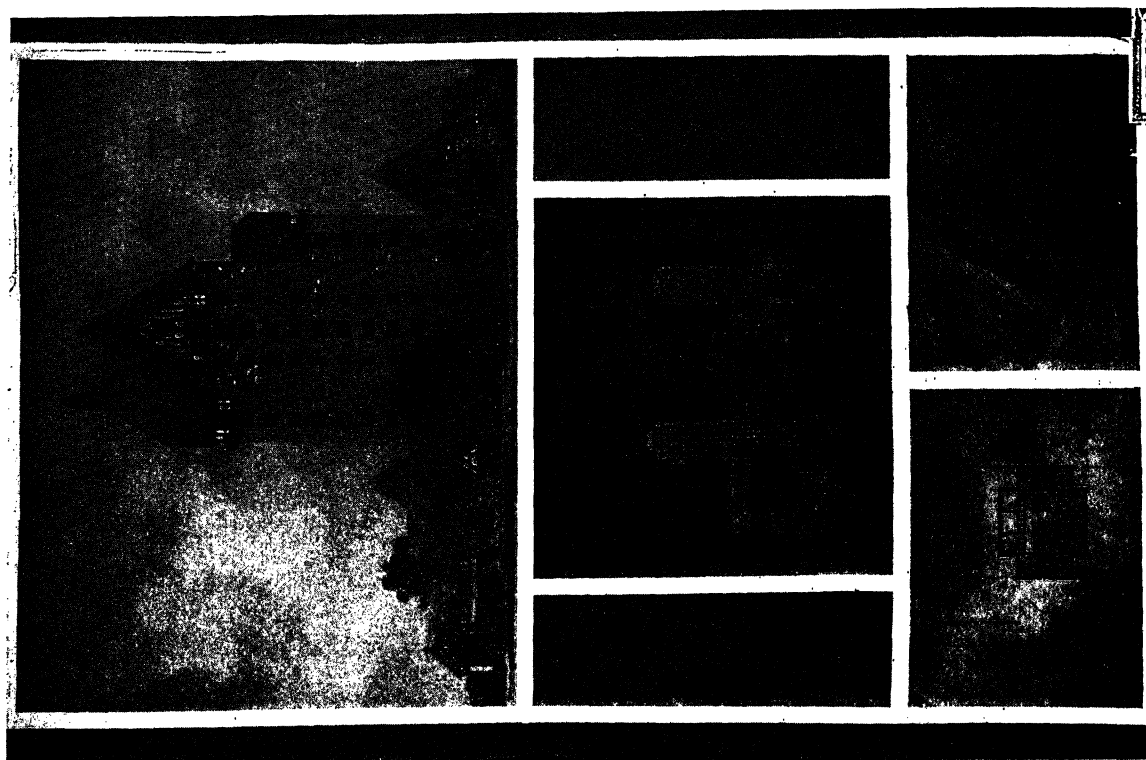
J. J. Keel

BEAUX ARTS COMPETITIONS



First Mention

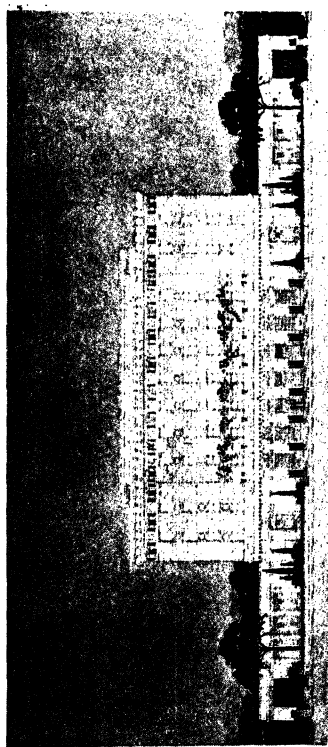
PAUL C. REED
A HOTEL IN A SMALL TOWN



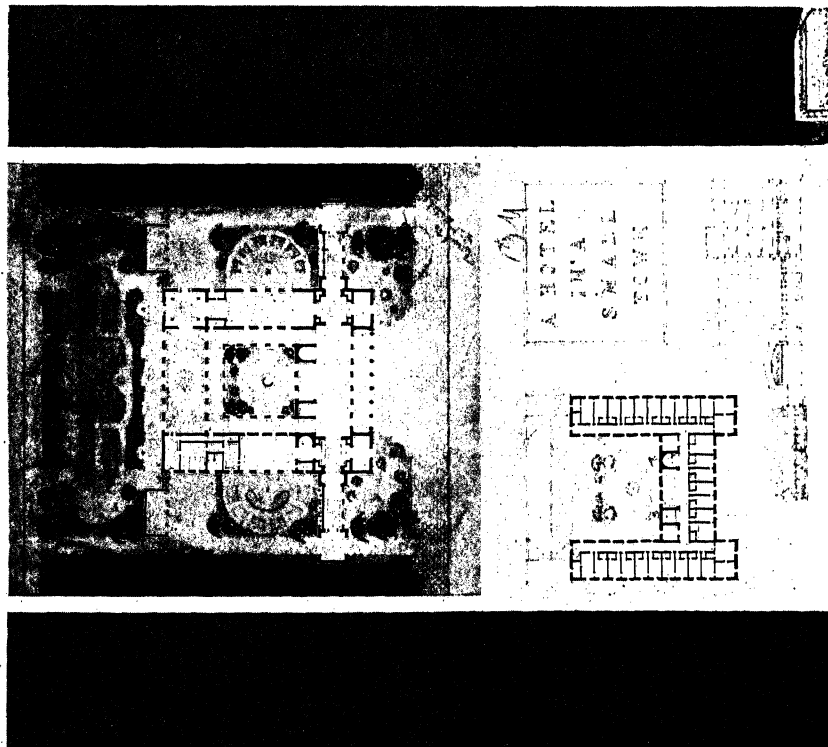
First Mention

C. W. HUNT

BEAUX ARTS COMPETITIONS

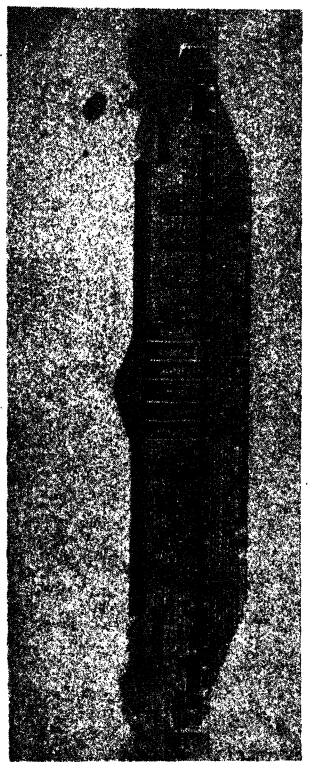


First Mention

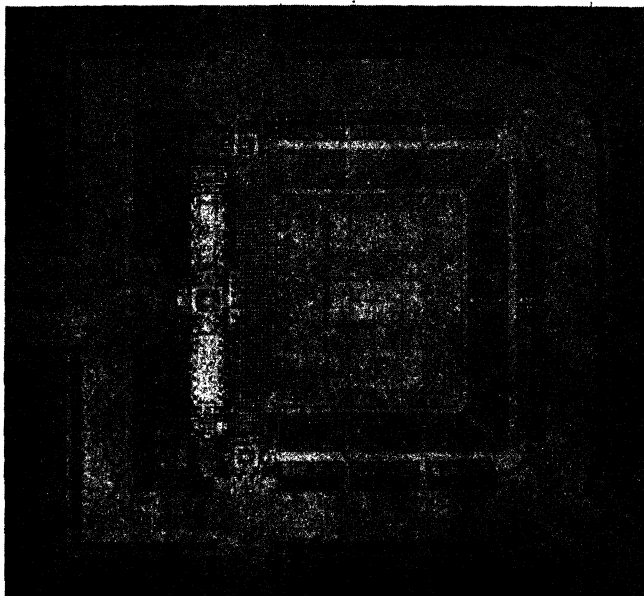


A HOTEL IN A SMALL TOWN

EMIL W. KLEE

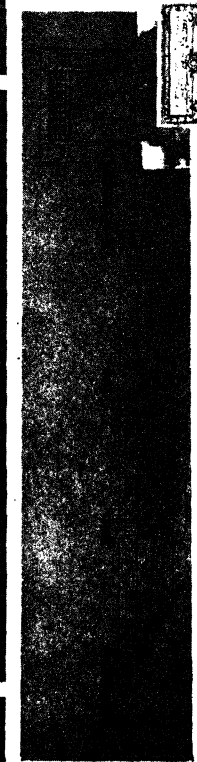


First Mention

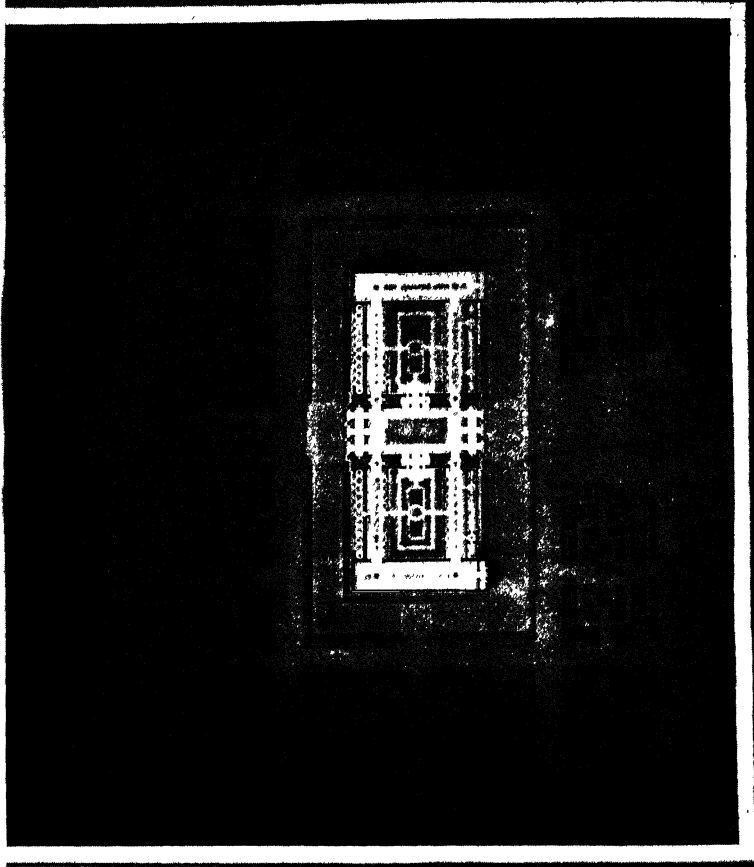
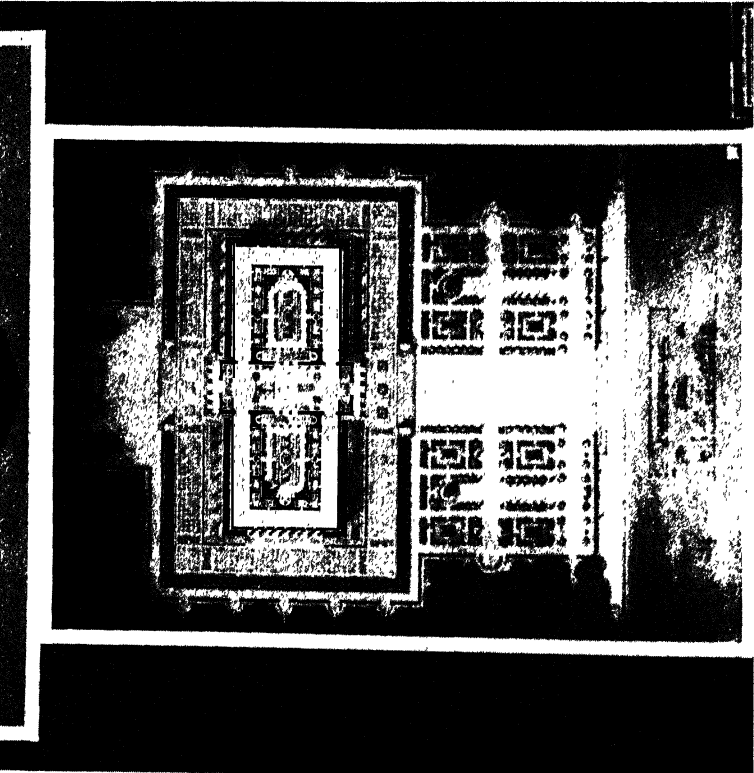
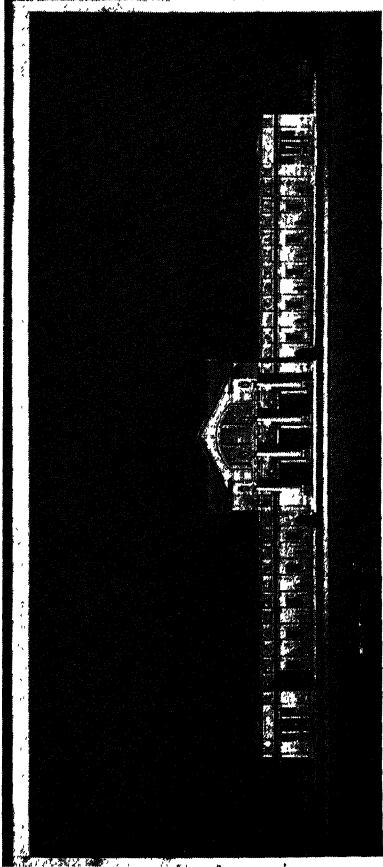
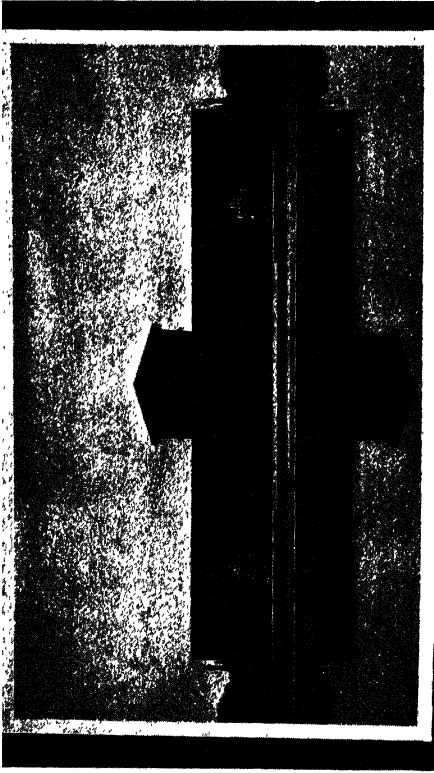


A TENNIS CLUB

EMIL W. KLEE



BEAUX ARTS COMPETITIONS

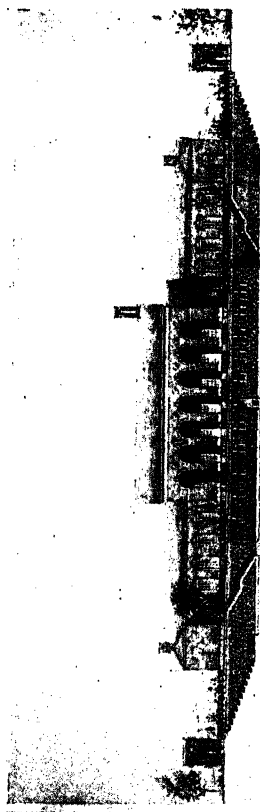


First Medal

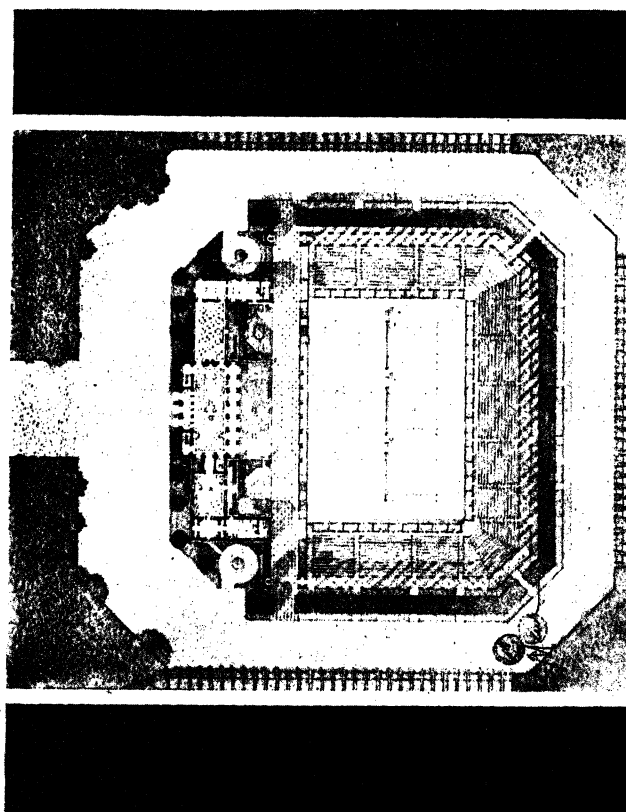
C. B. MARES Mention

E. O. ANDERSON

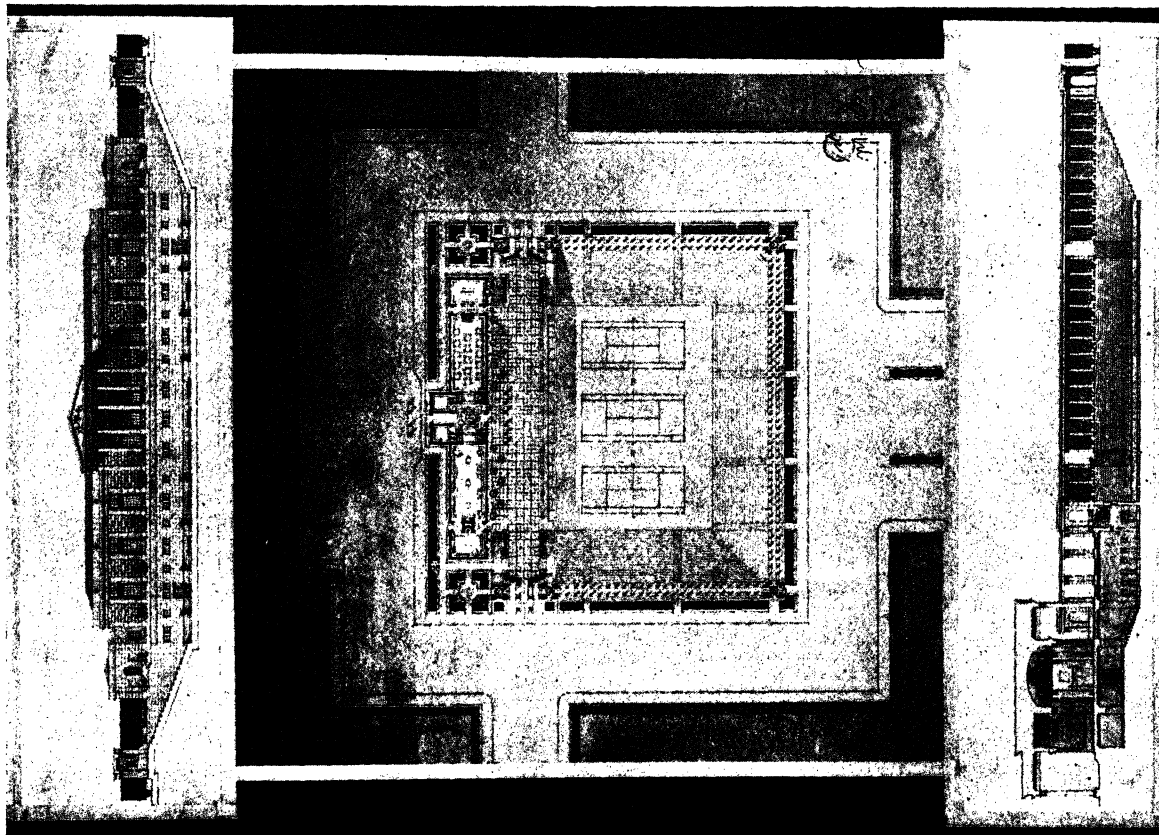
BEAUX ARTS COMPETITIONS



First Mention

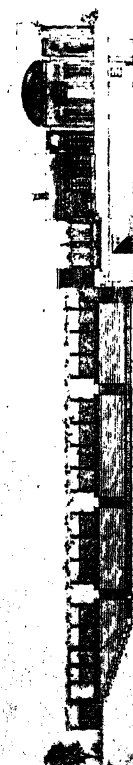


D. D. McGERVEY



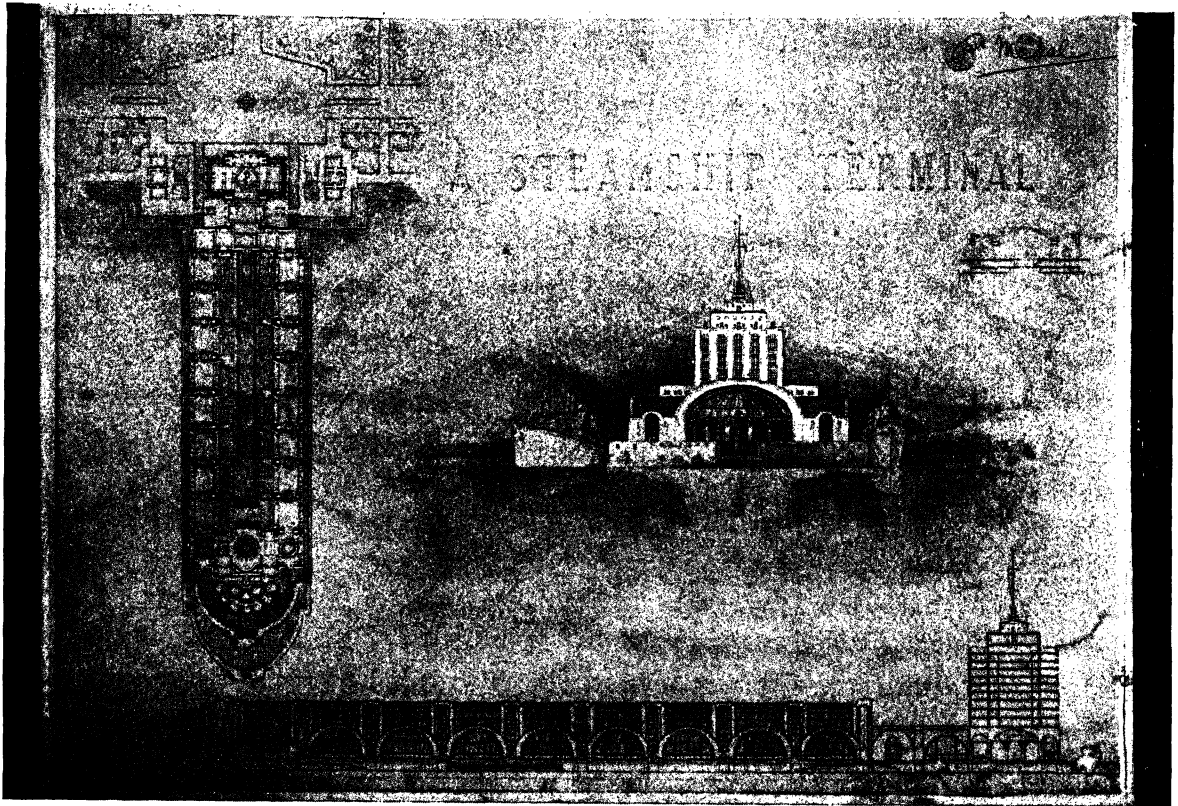
First Mention

C. W. HUNT



A TENNIS CLUB

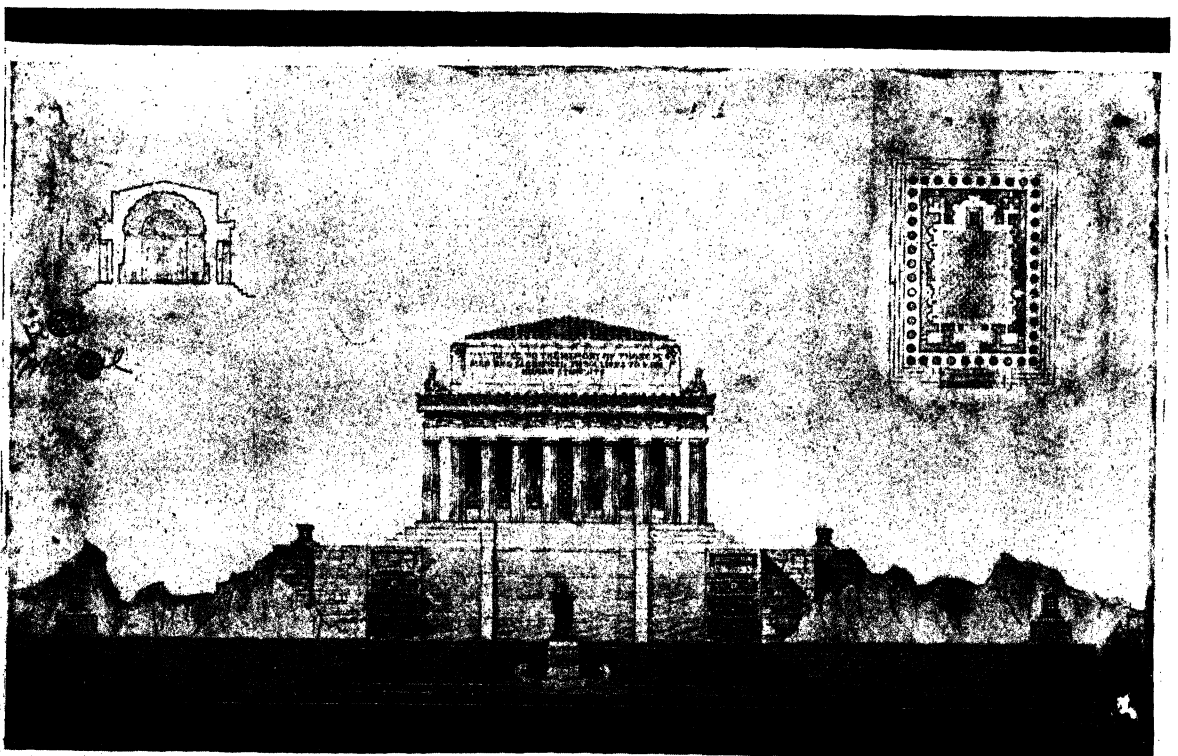
BEAUX ARTS COMPETITIONS



Second Medal

A STEAMSHIP PIER

J. G. TODD

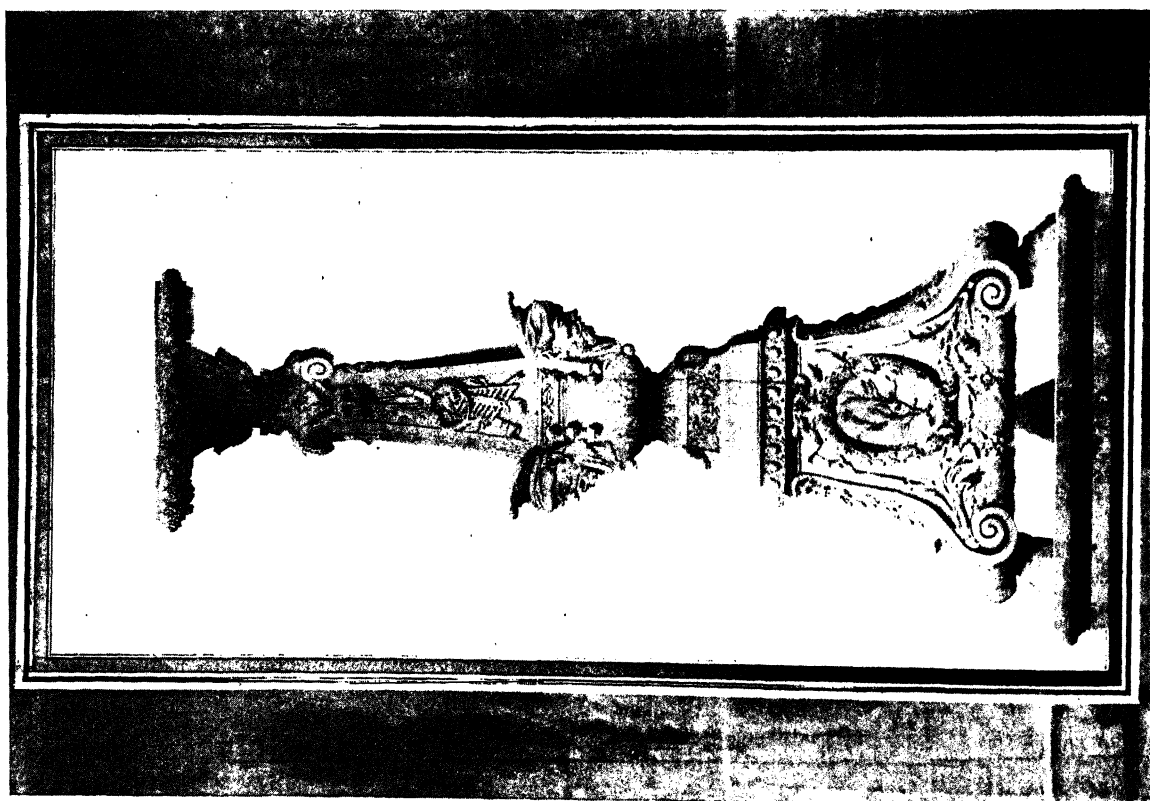


Second Medal

A NAVAL PANTHEON

EMIL W. KLEE

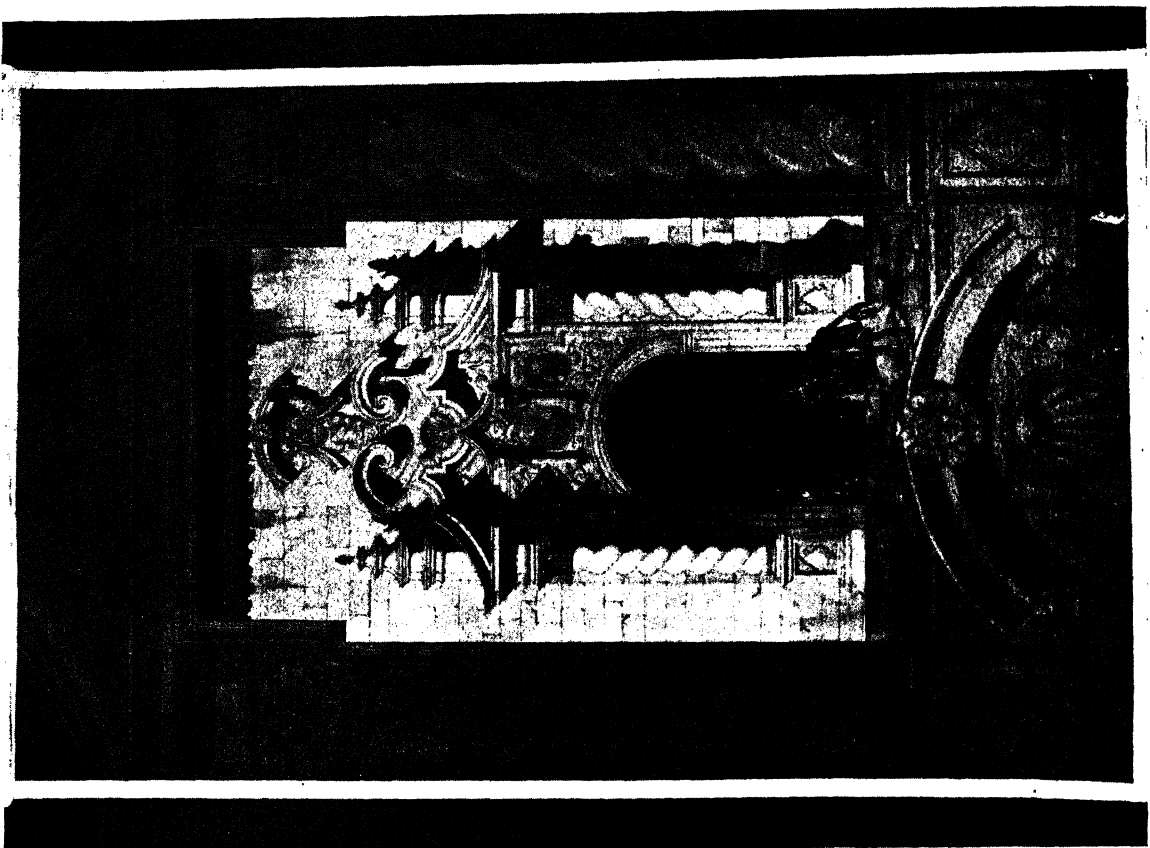
BEAUX ARTS COMPETITIONS



Third Medal

A MEASURED DRAWING

L. H. BUTTOS

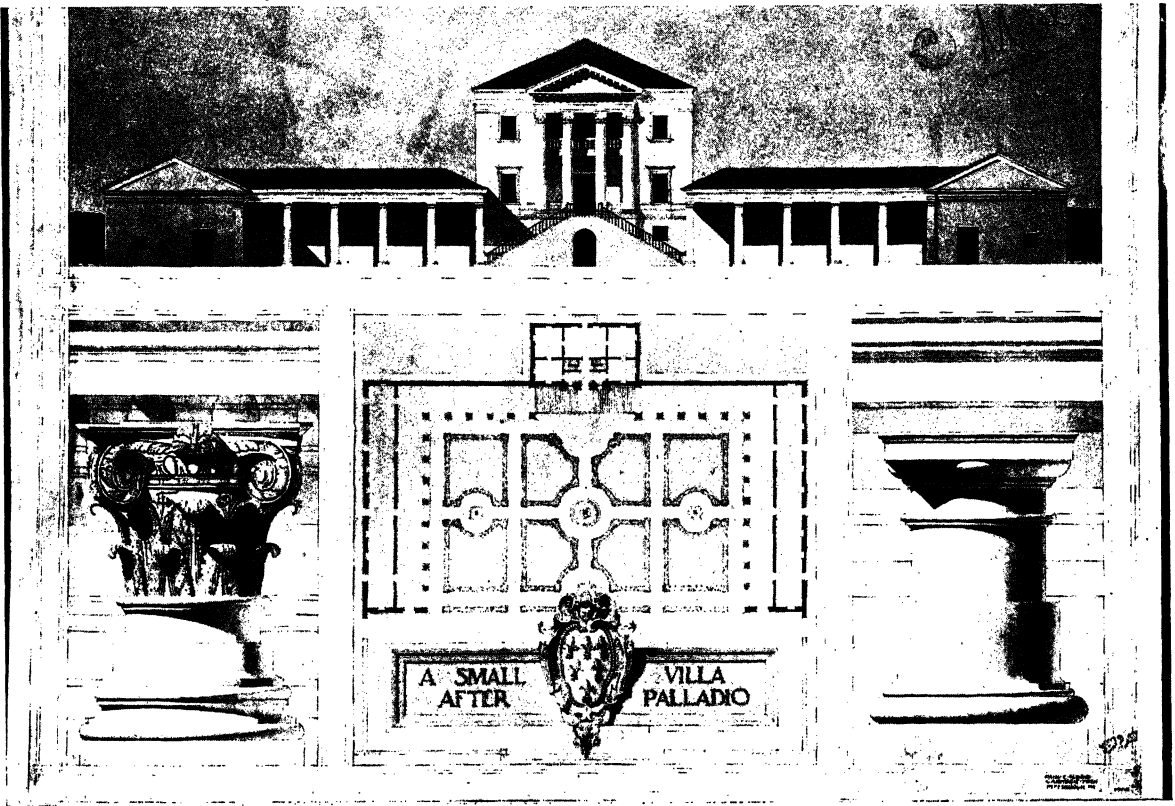


Archaeology Mention

A SPANISH DOORWAY

J. J. KEEL

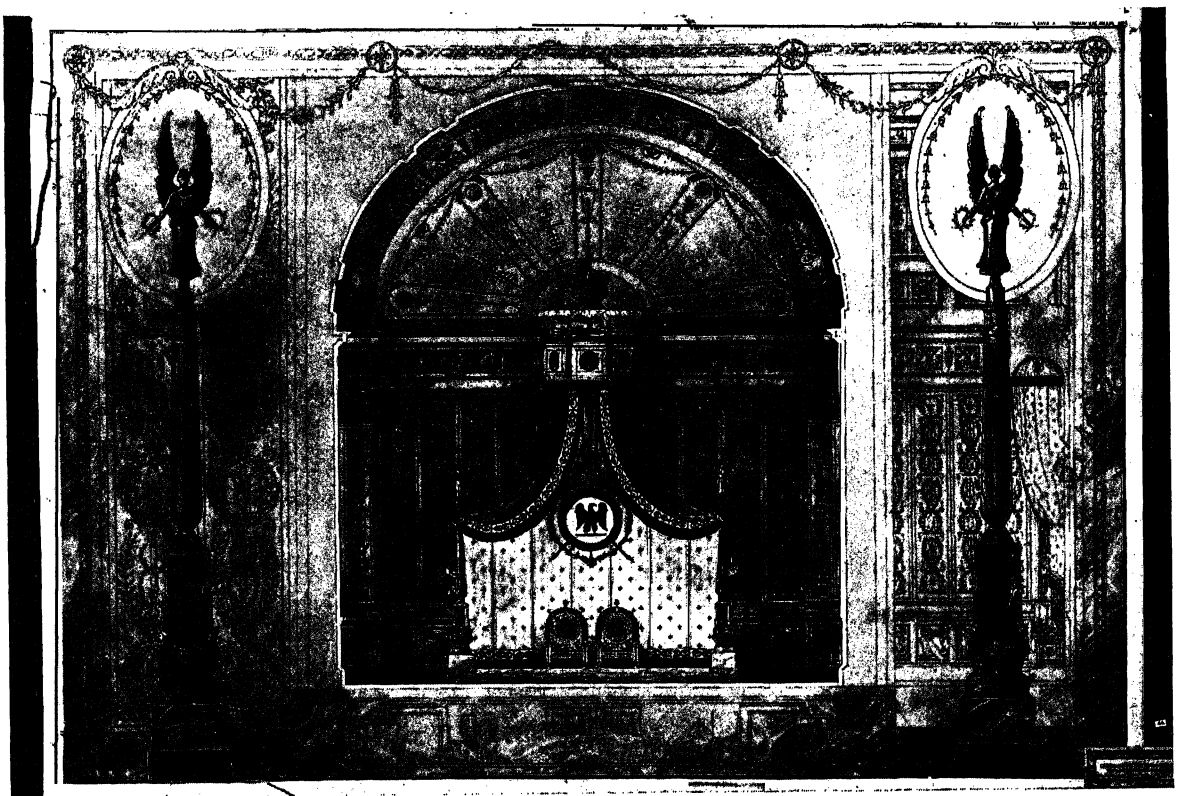
BEAUX ARTS COMPETITIONS



Archaeology Third Medal

A SMALL VILLA AFTER THE STYLE OF PALLADIO

P. C. REED

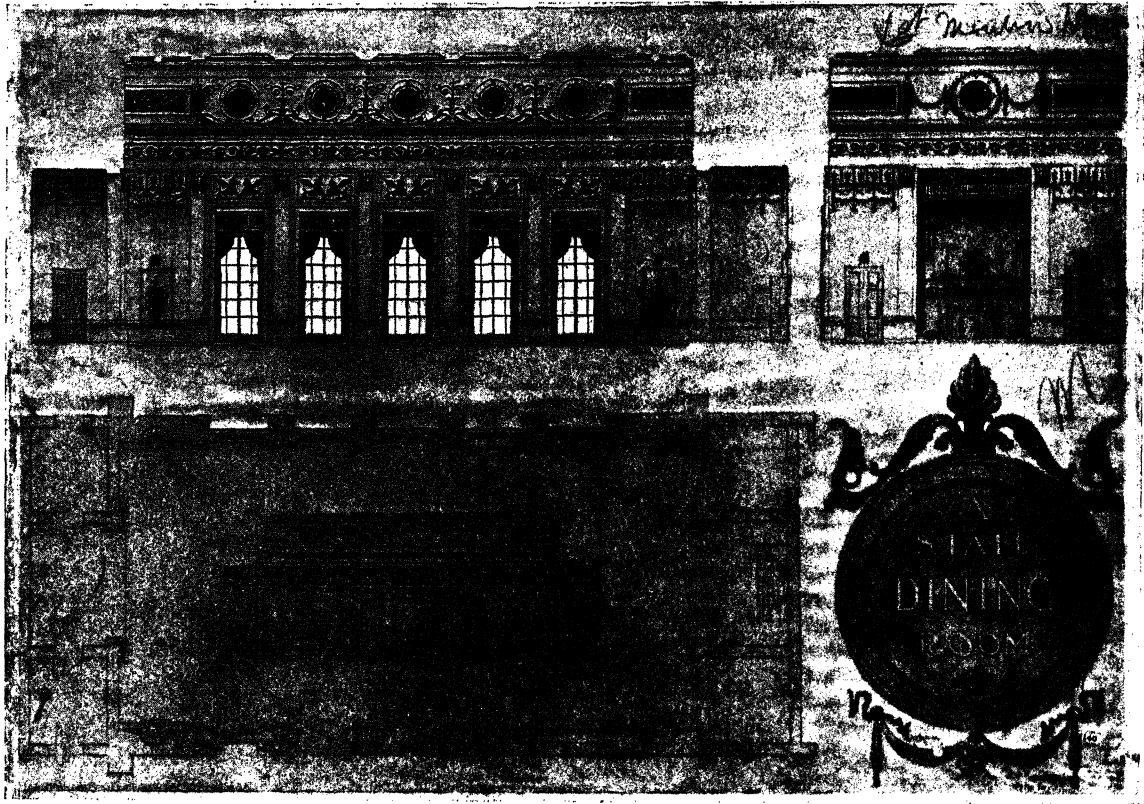


Archaeology Third Medal

AN EMPIRE THRONE ROOM

A. TAORMINIA

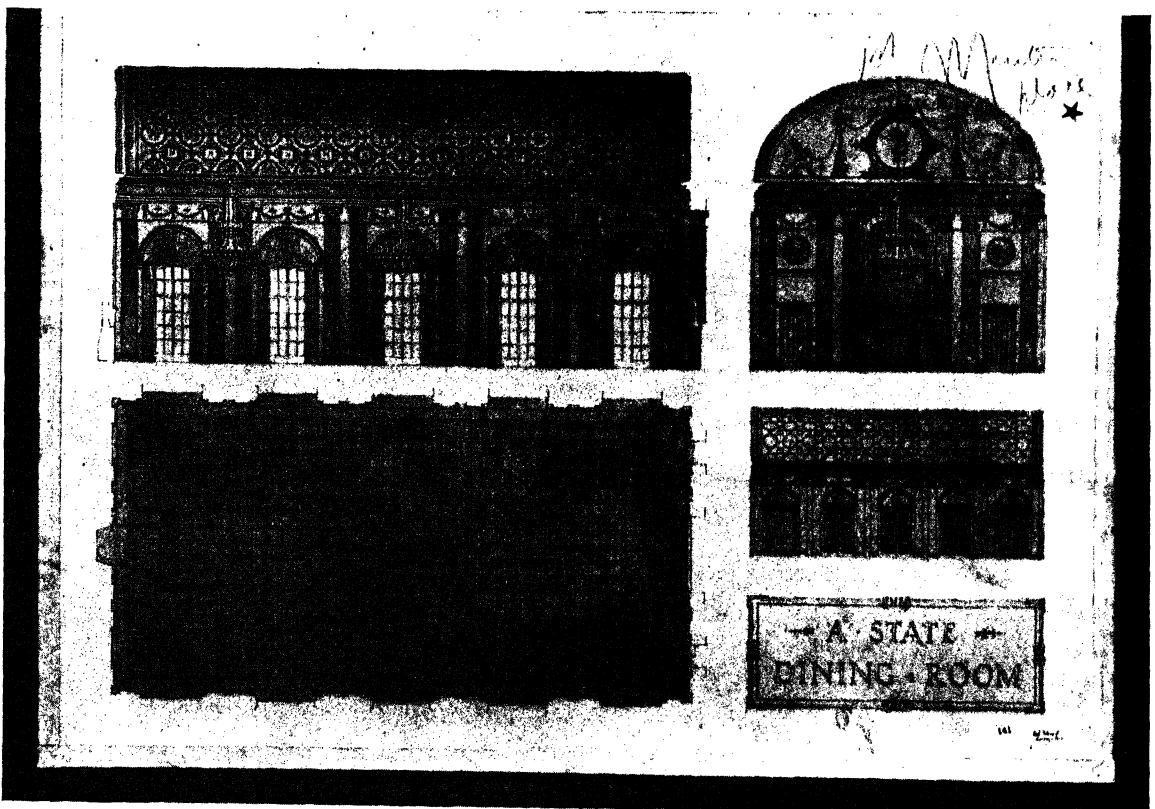
BEAUX ARTS COMPETITIONS



First Mention Placed

A STATE DINING ROOM

W. A. CHESTERMAN

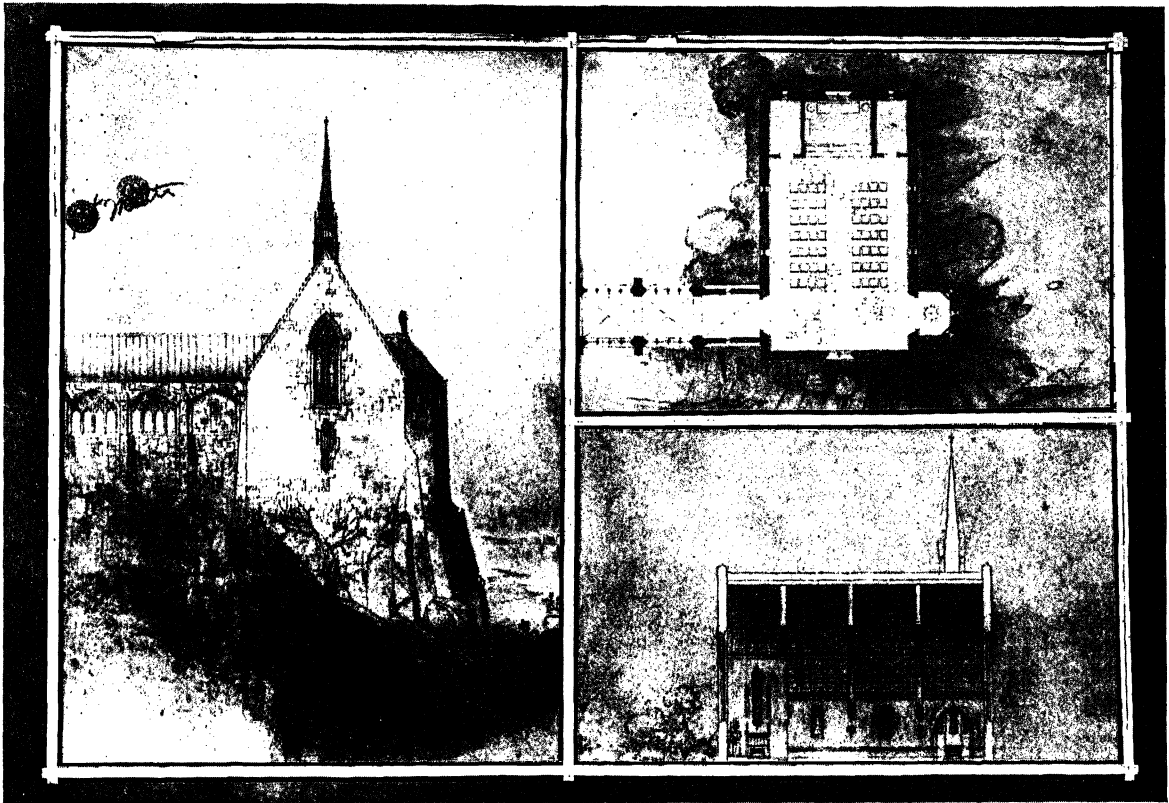


First Mention Placed

A STATE DINING ROOM

PAUL HOBERST

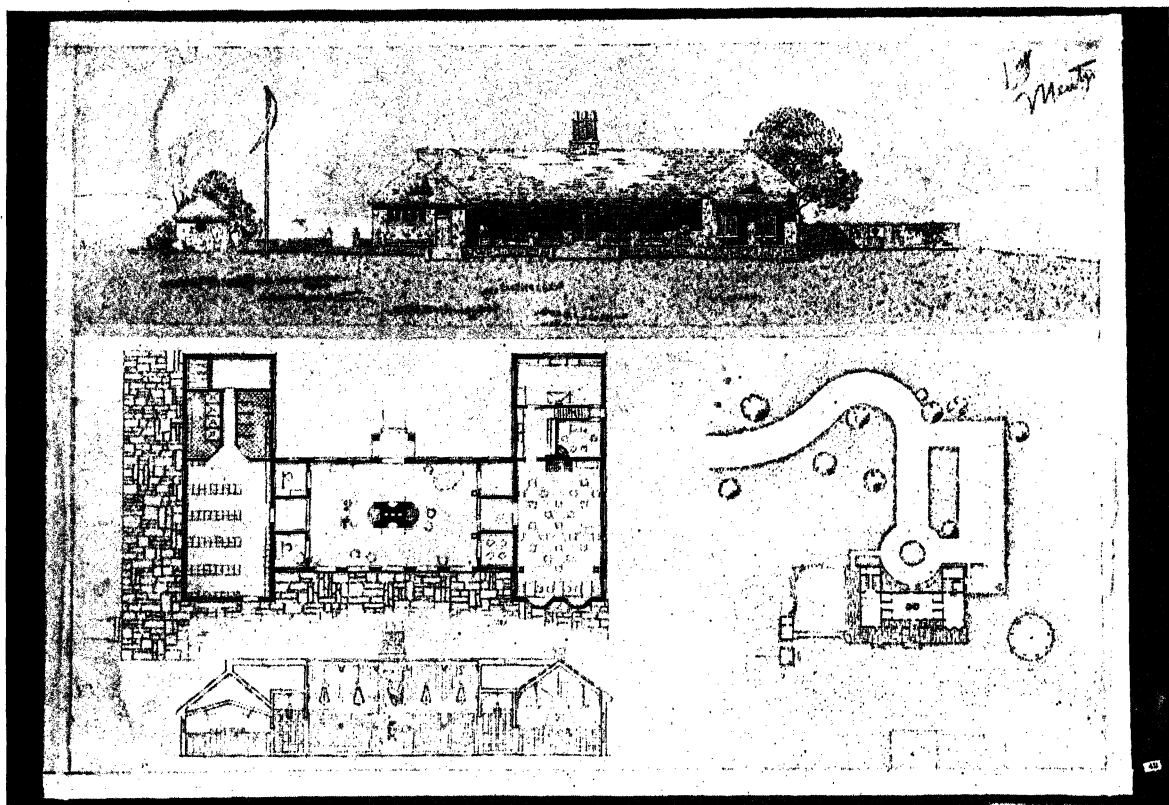
BEAUX ARTS COMPETITIONS



First Mention

A PRIVATE CHAPEL

C. B. MARKS

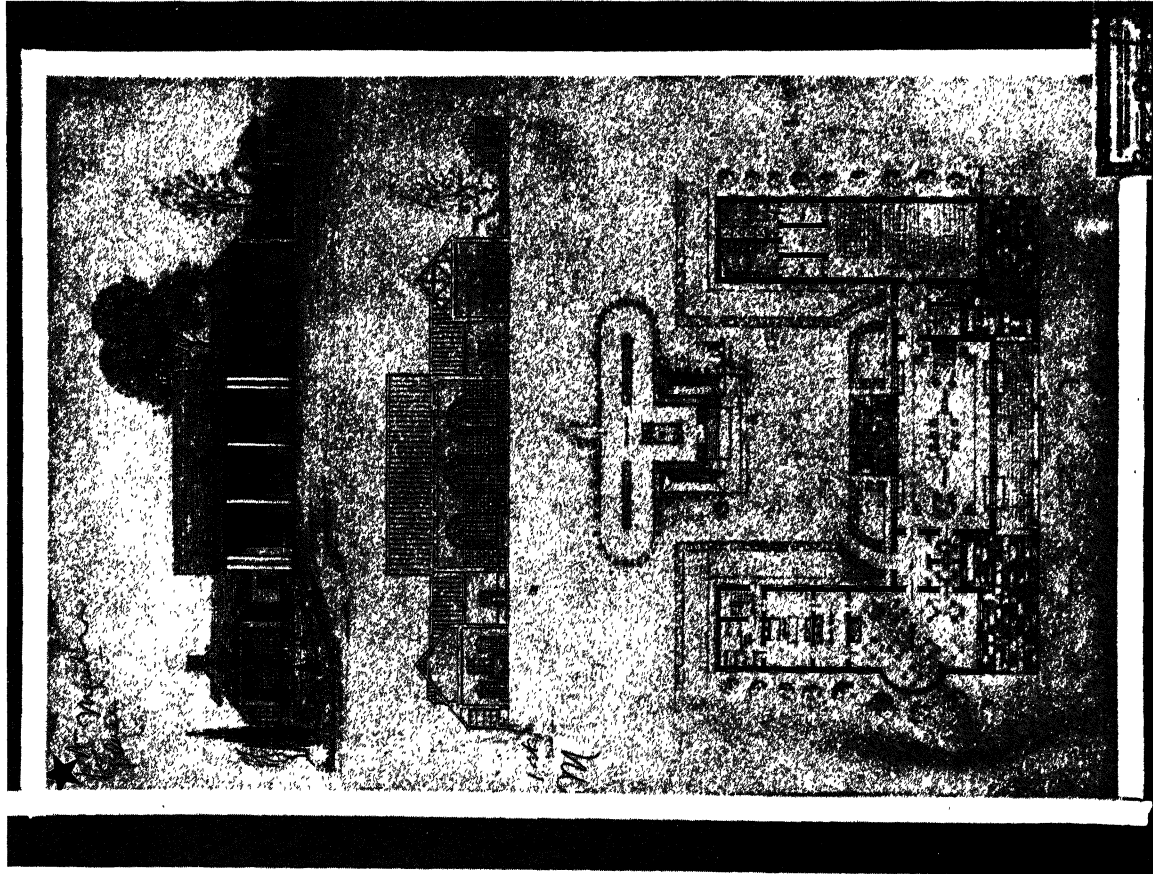


First Mention

A GOLF CLUB

LOUISE BARTON

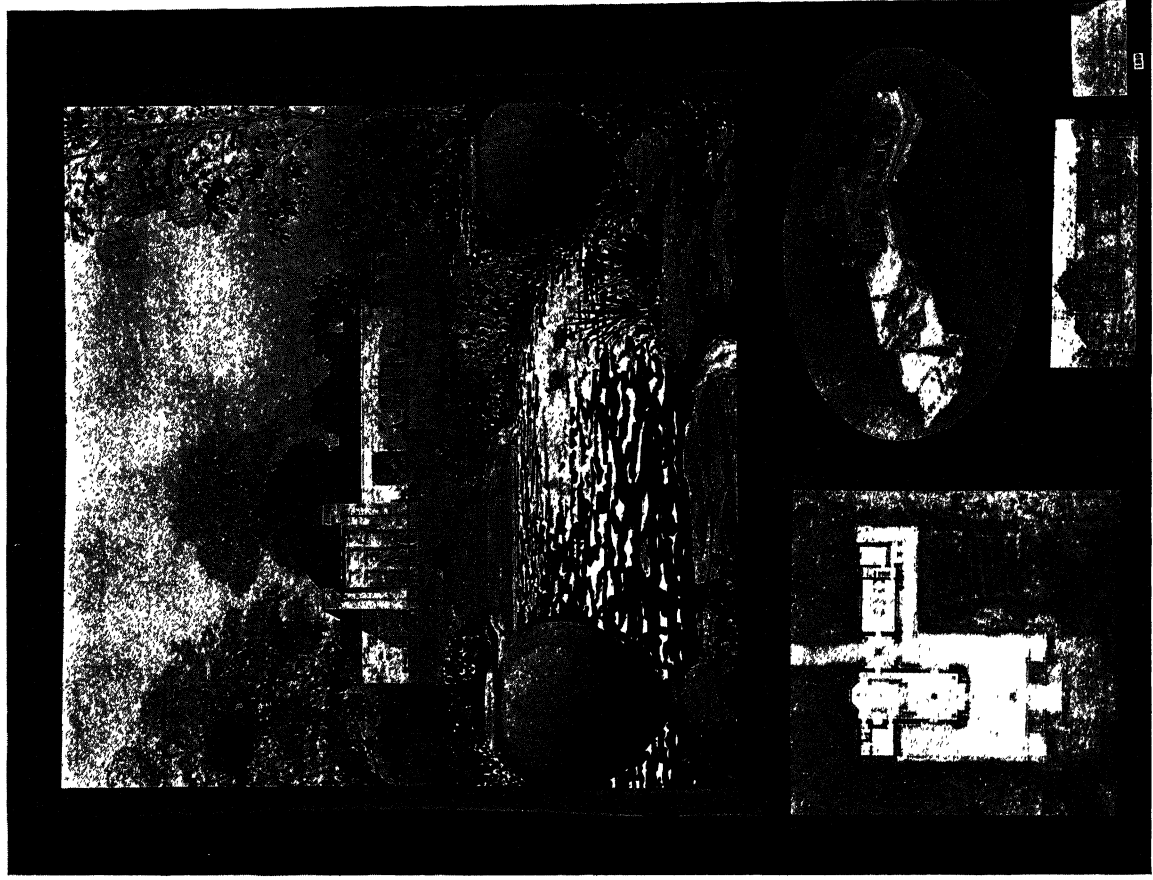
BEAUX ARTS COMPETITIONS



First Mention Placed

A GOLF CLUB

W. Z. BANE

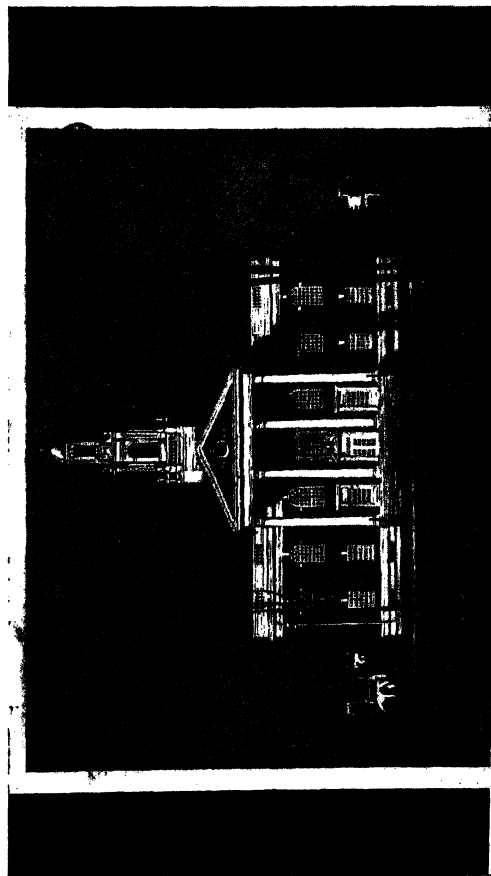


First Mention Placed

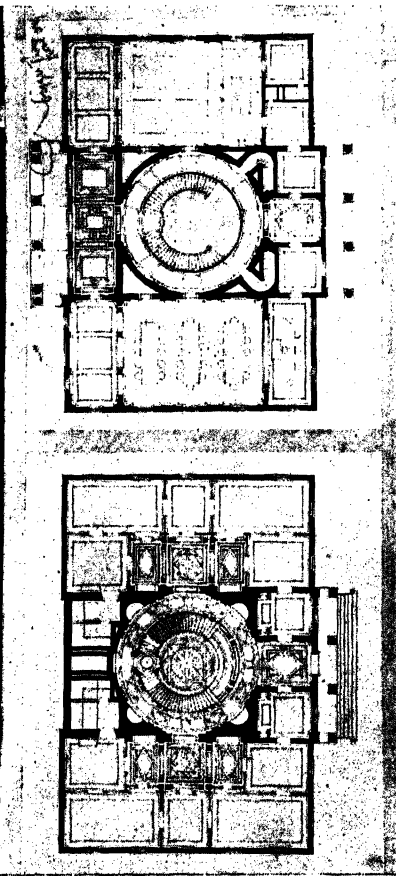
A SCULPTOR'S STUDIO

F. H. FLOYD

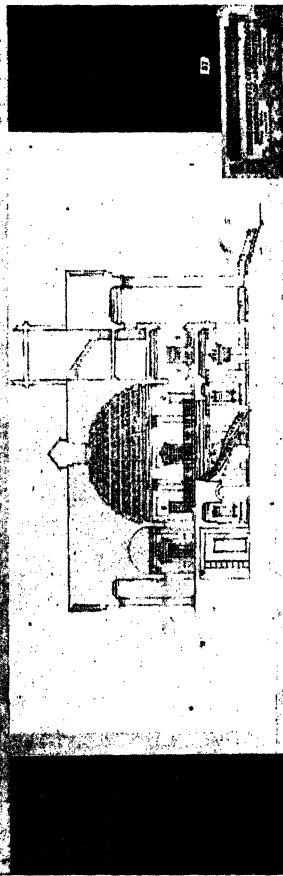
BEAUX ARTS COMPETITIONS



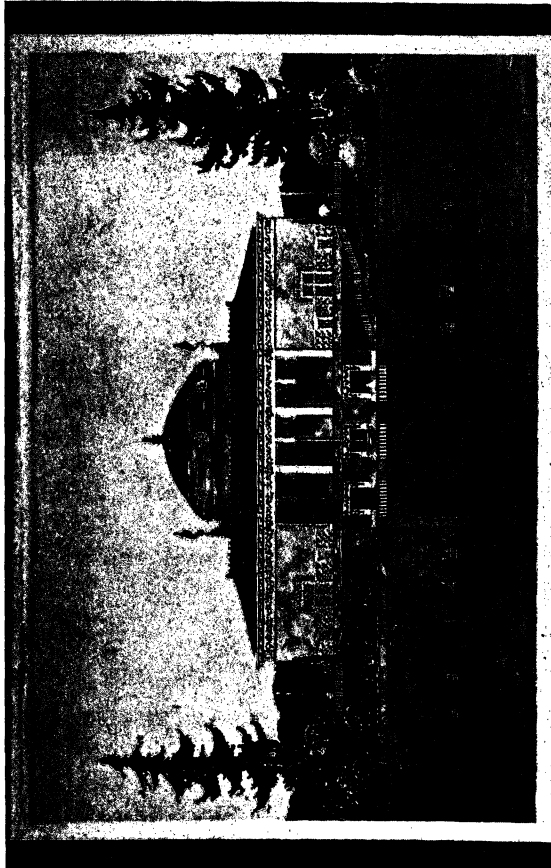
First Mention Placed



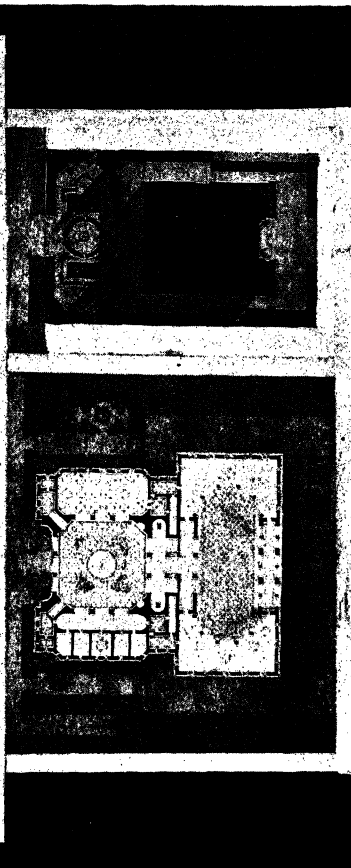
A TOWN HALL



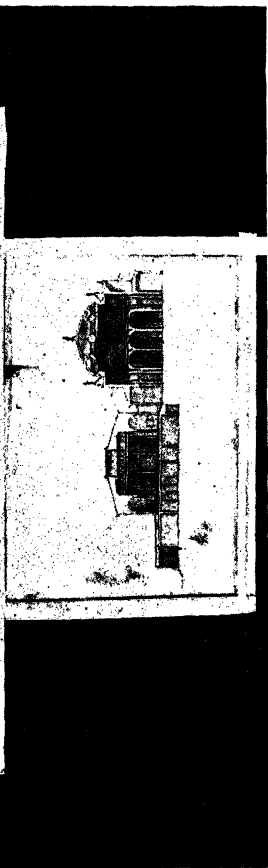
W. A. STAPLES



First Mention

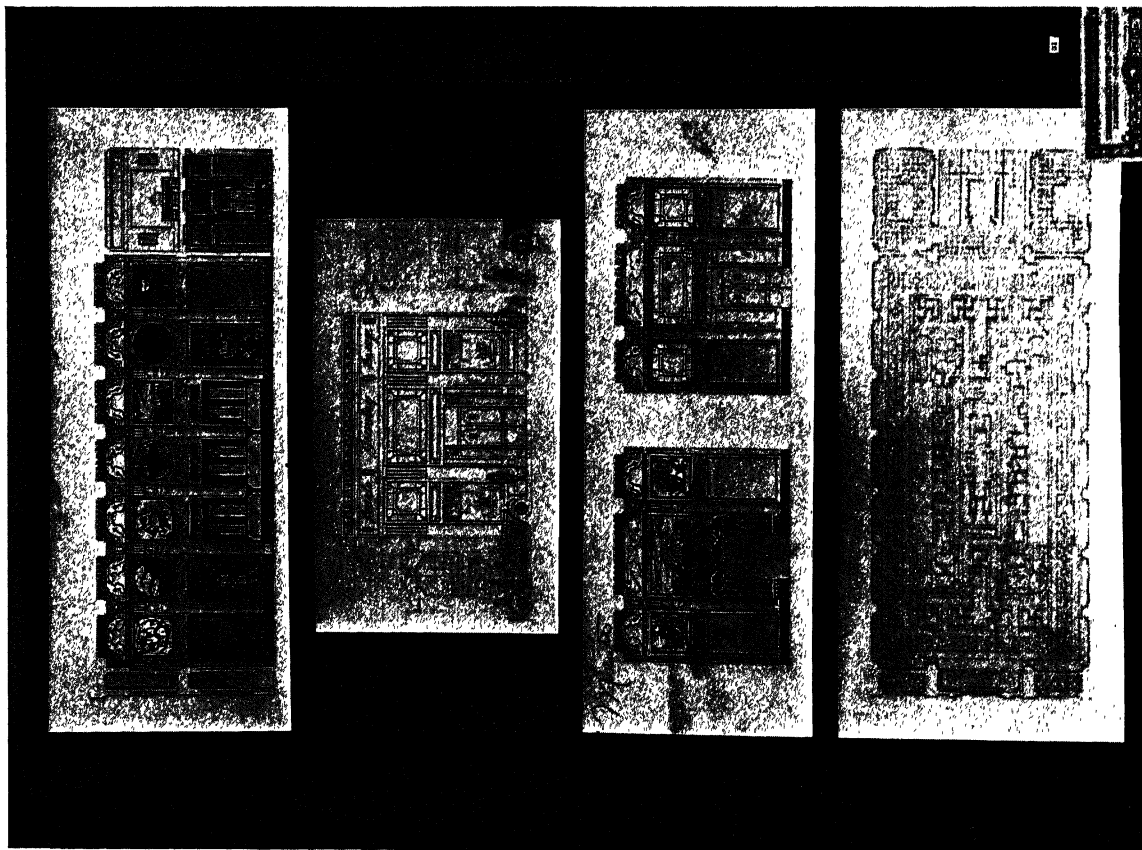


A CASINO



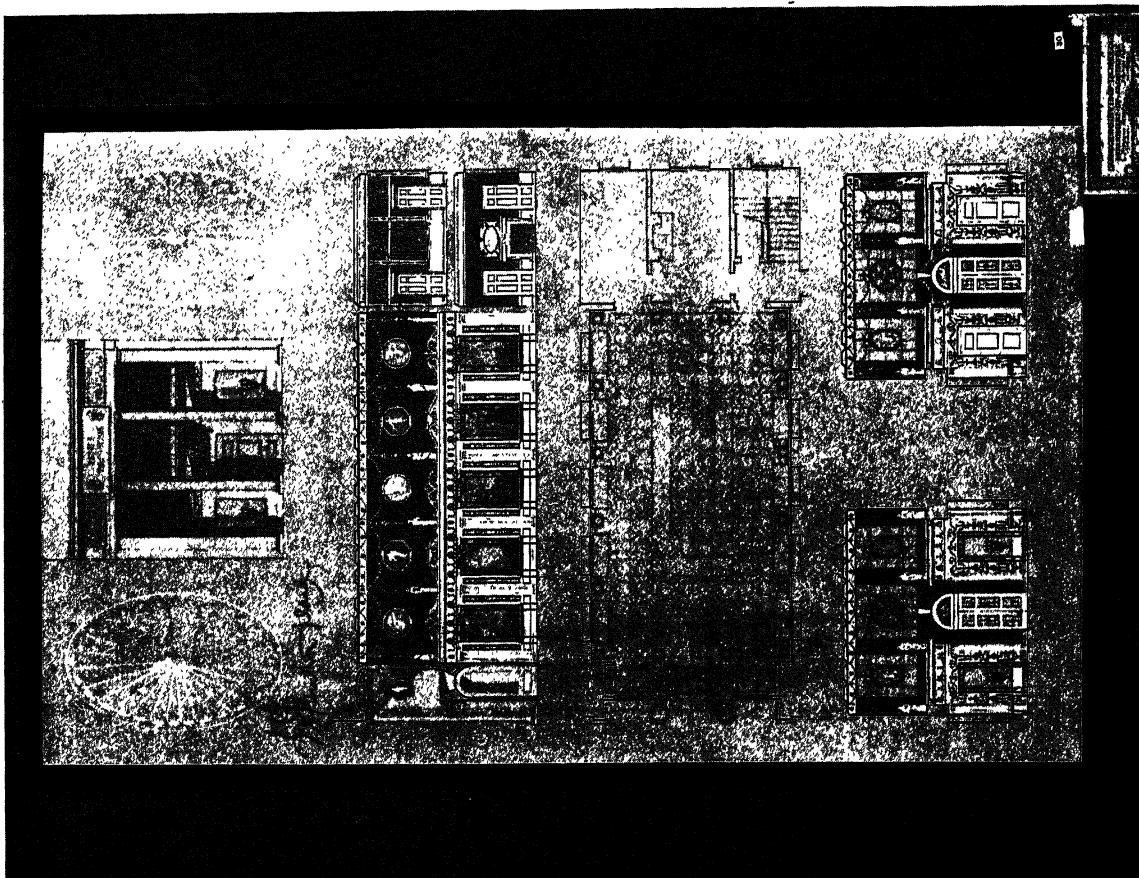
J. W. FRITZ

BEAUX ARTS COMPETITIONS



First Mention

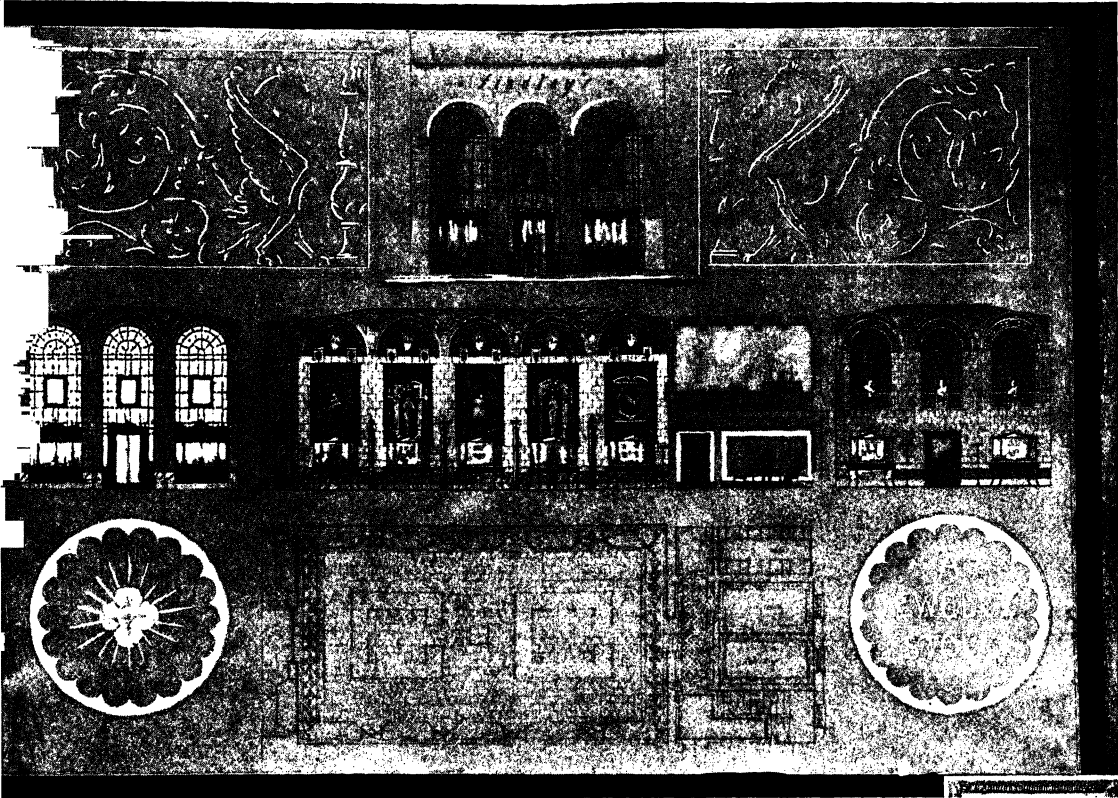
W. C. PYLE
A JEWELRY STORE



First Mention Placed
A JEWELRY STORE

D. D. McGERVEY

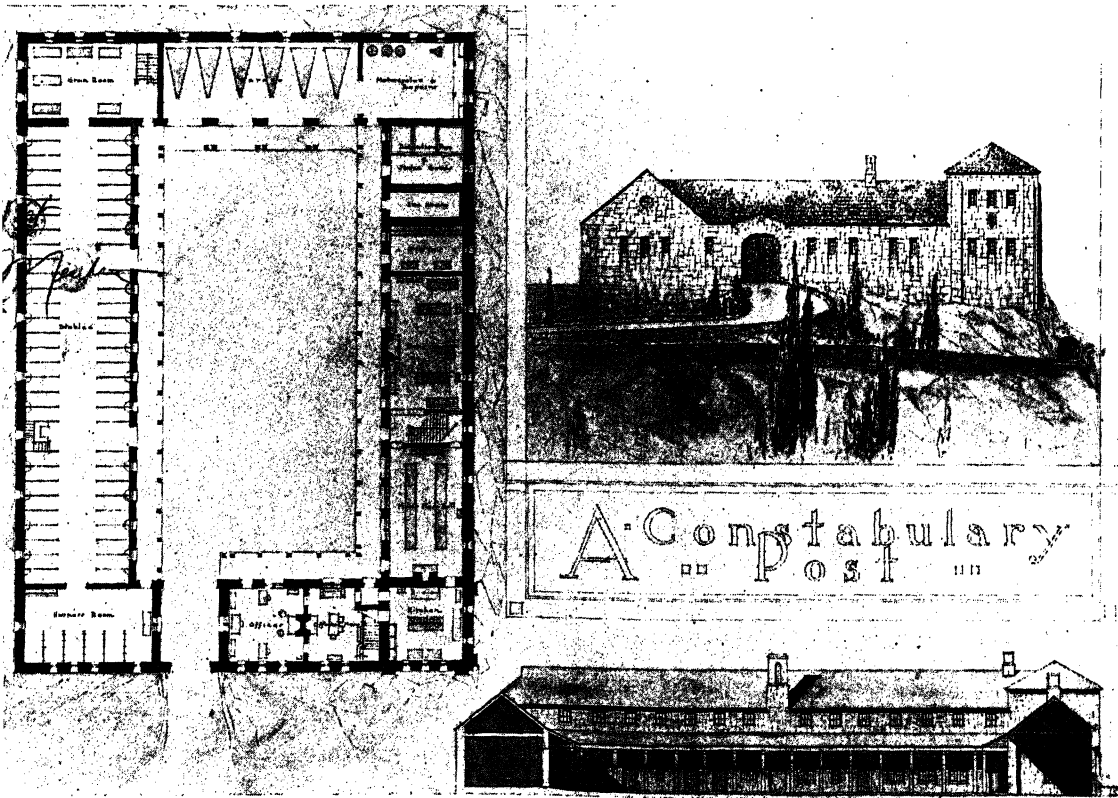
BEAUX ARTS COMPETITIONS



Mention Placed

A JEWELRY STORE

A. TAORMINA

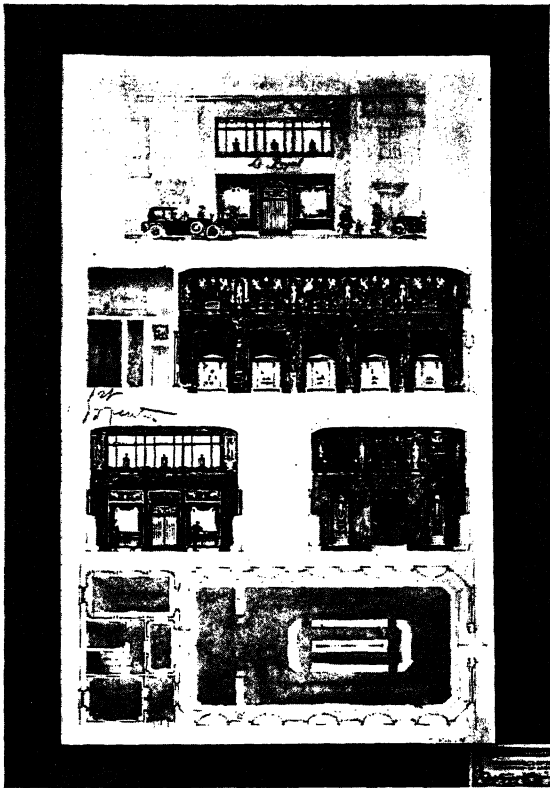


Mention

A CONSTABULARY POST

F. N. RENNISON

BEAUX ARTS COMPETITIONS



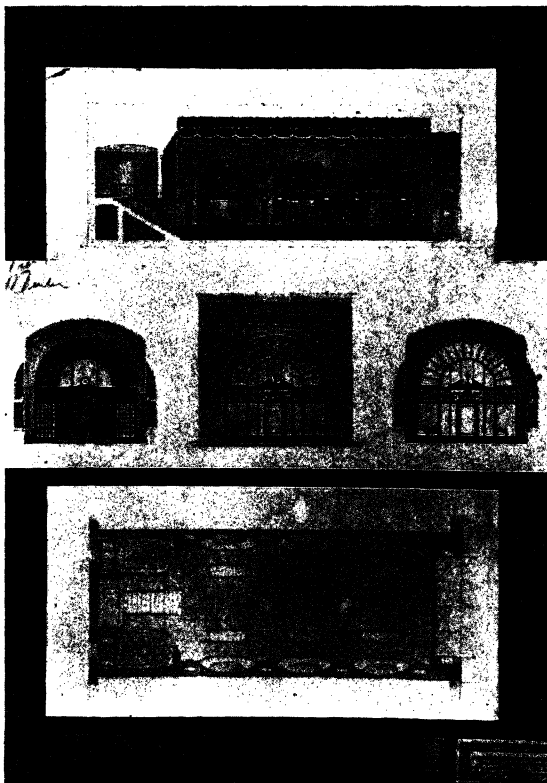
First Mention

J. N. FRANKLIN



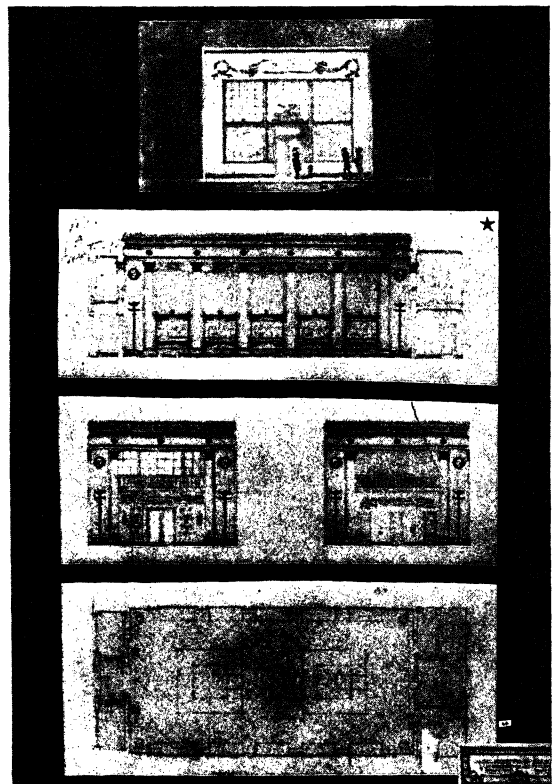
First Mention

C. A. LAKE



First Mention

PAUL HONORST



First Mention Placed

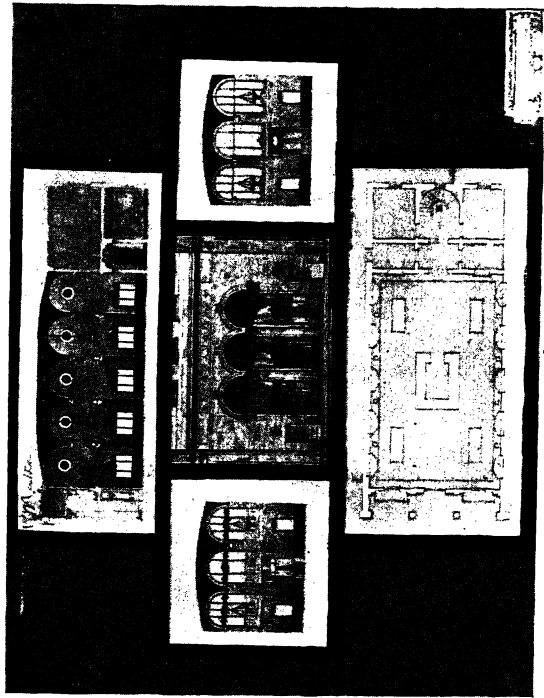
H. A. PAGE

A JEWELRY STORE

BEAUX ARTS COMPETITIONS



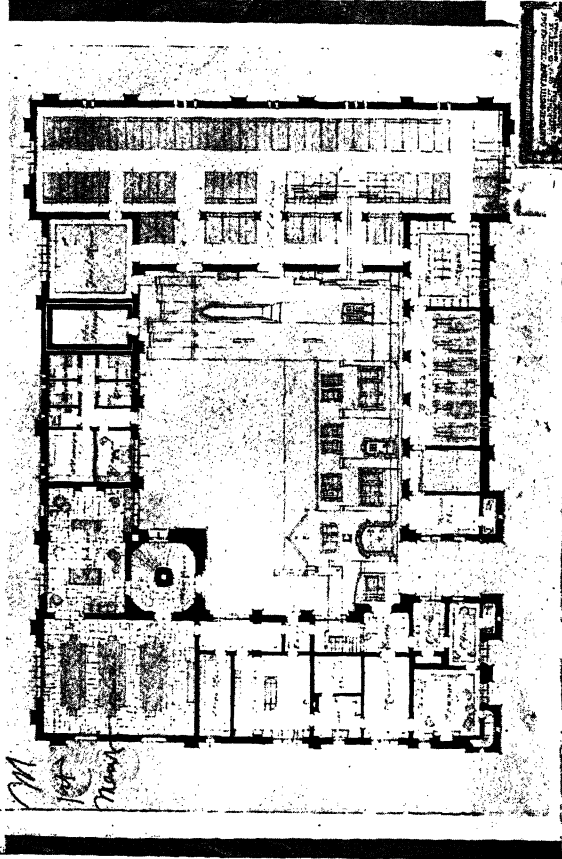
47



First Mention Placed

A JEWELRY STORE

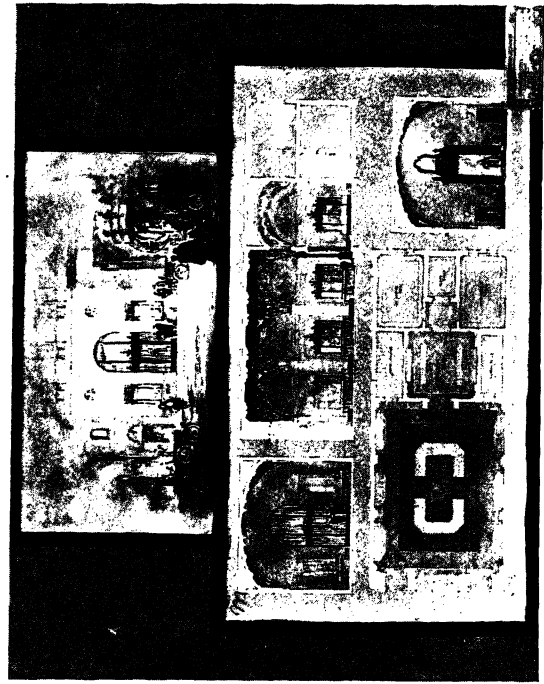
H. C. KRESLE



First Mention

A CONSTABULARY POST

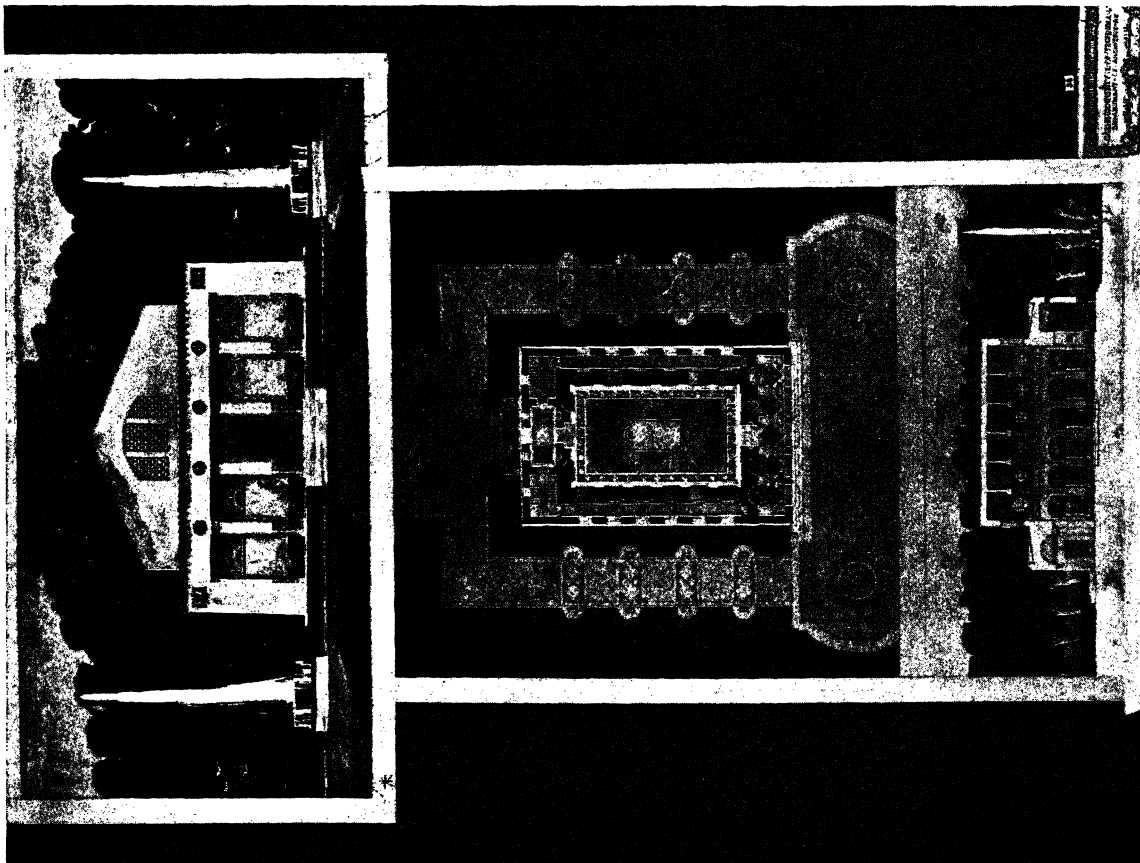
W. A. STAPLES



First Mention Placed

A JEWELRY STORE

W. A. STAPLES

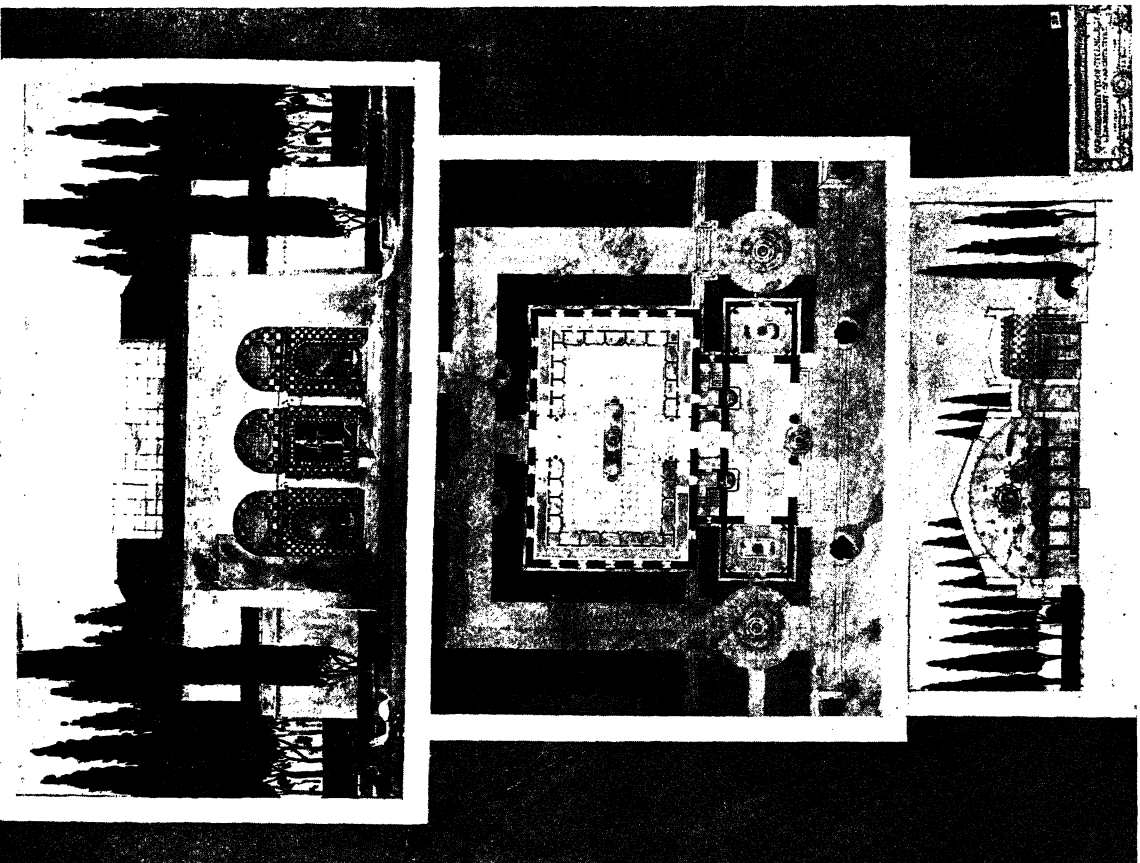


First Mention Placed

A. D. REID

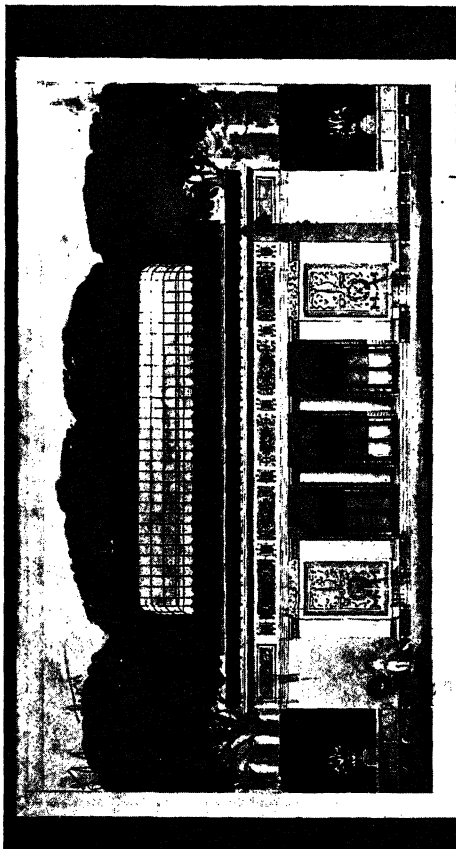
First Mention

AN AQUARIUM



LEONARD BROIDA

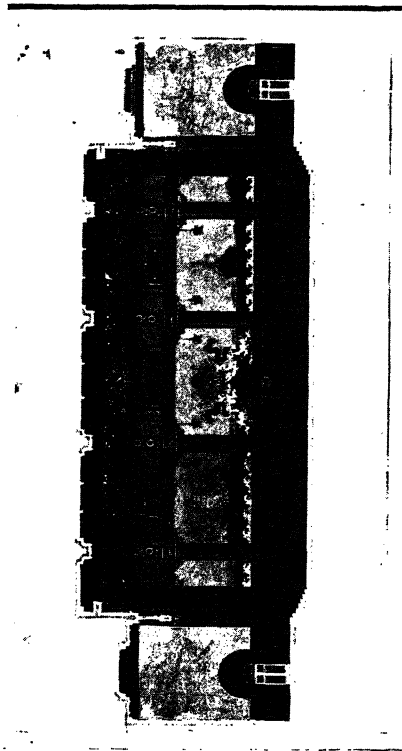
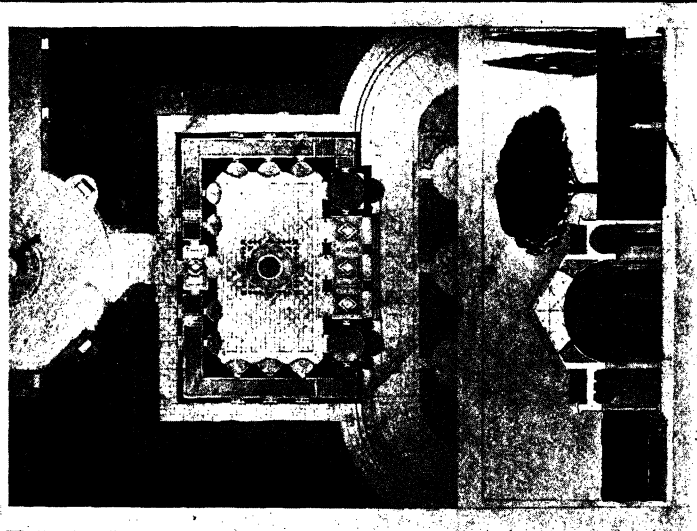
BEAUX ARTS COMPETITIONS



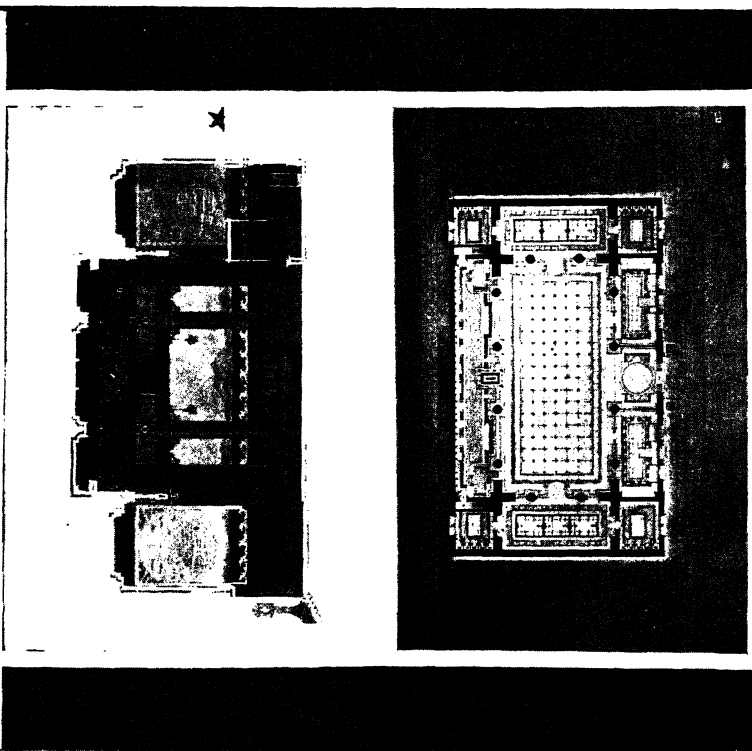
First Mention

AN AQUARIUM

E. M. GEARHART



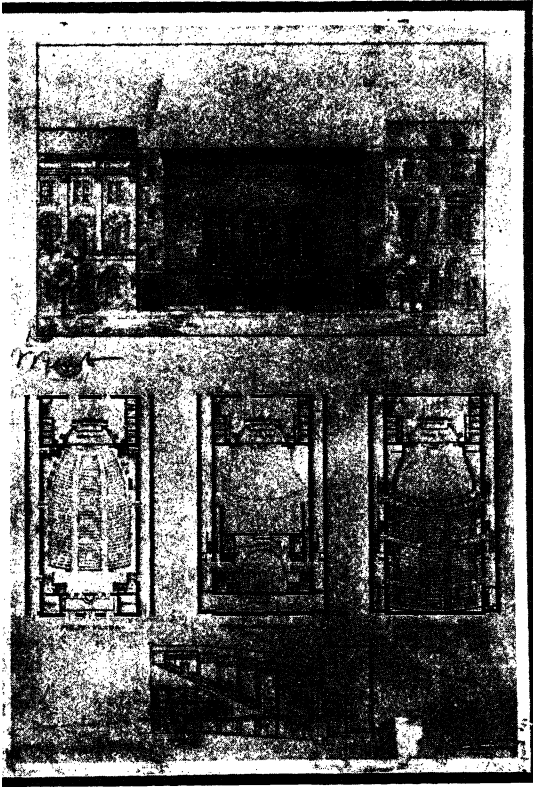
First Mention Placed



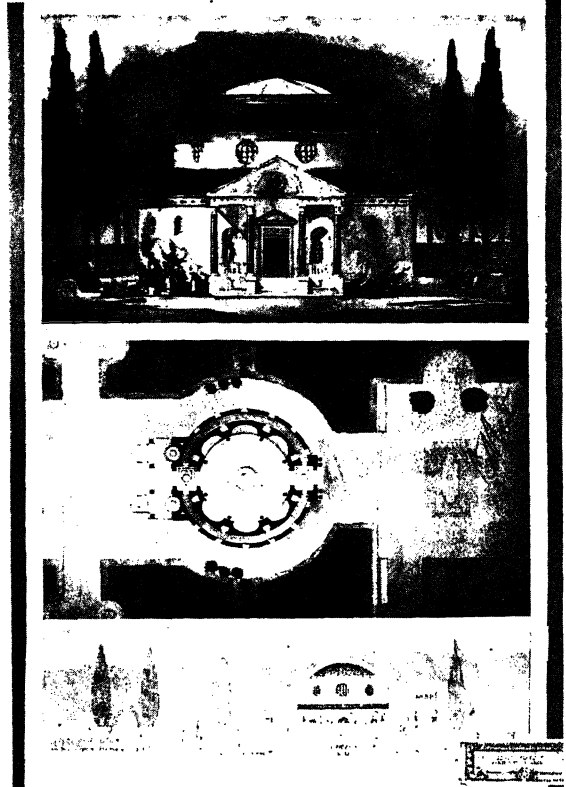
A STEAMSHIP OFFICE

C. E. SILLING

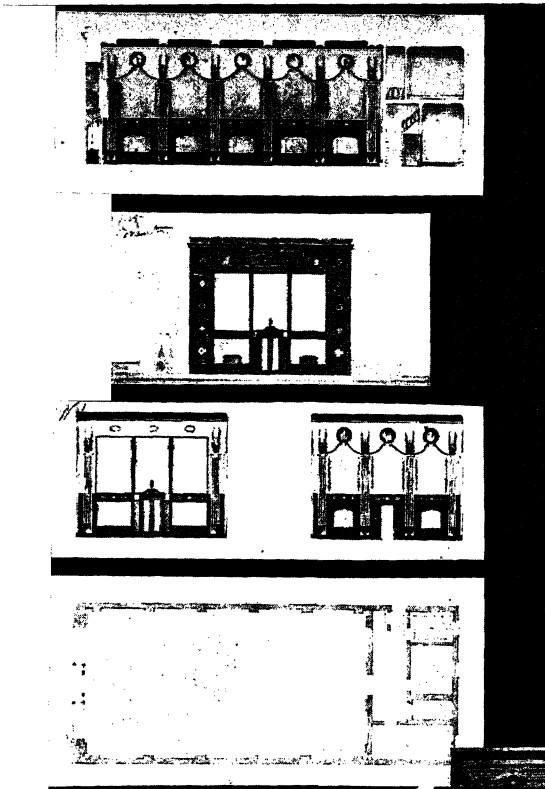
BEAUX ARTS COMPETITIONS



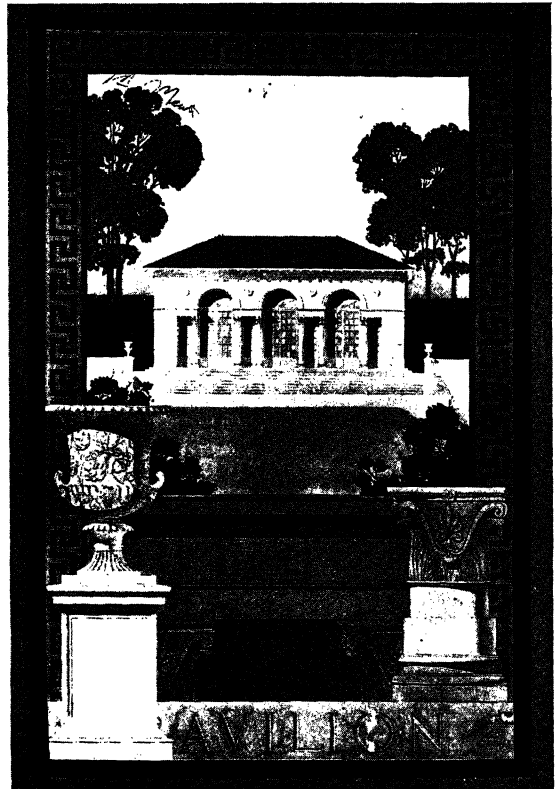
First Mention JAMES W. MINICK
A MOTION PICTURE THEATRE



First Mention J. B. BLAIR
AN AQUARIUM

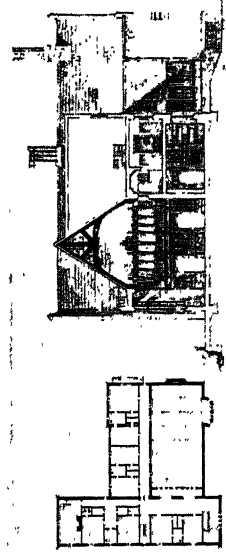
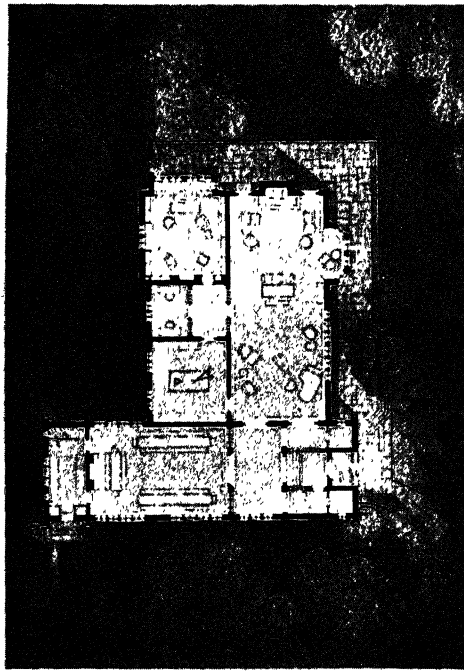


First Mention C. P. ZIMMERS
A JEWELRY STORE



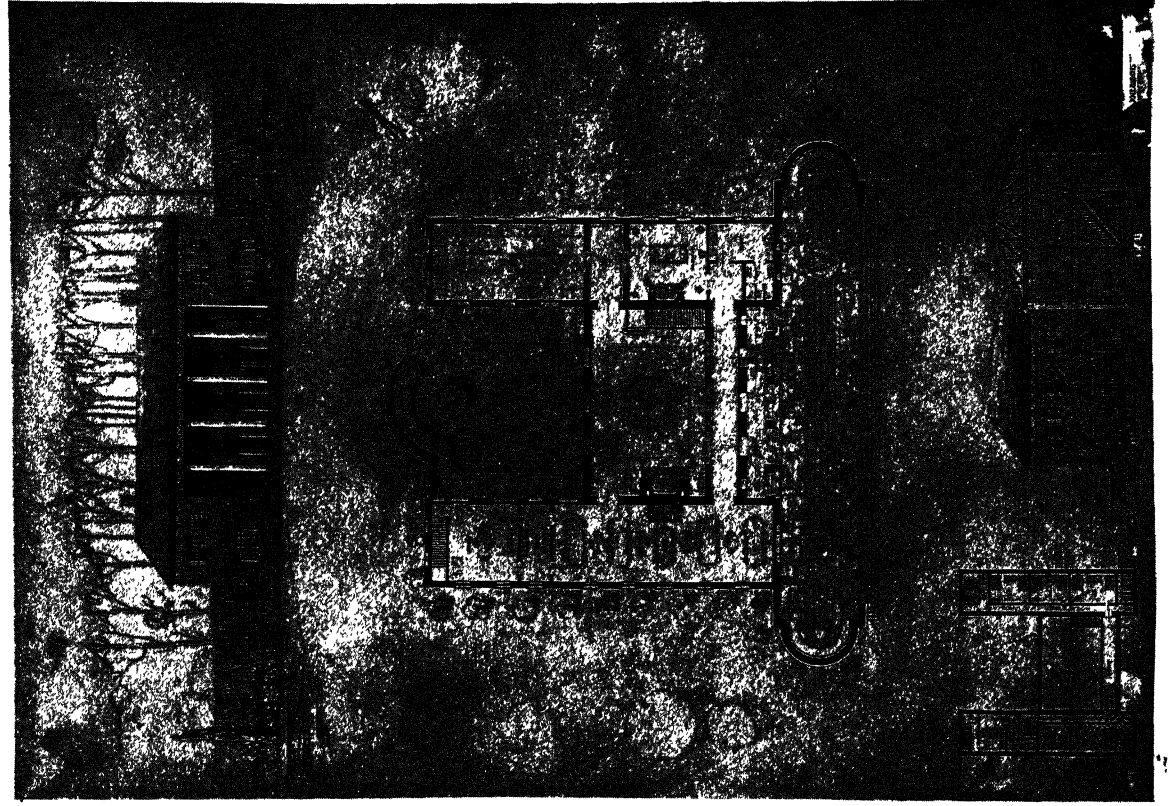
First Mention W. S. FORSYTH
A PAVILION

BEAUX ARTS COMPETITIONS



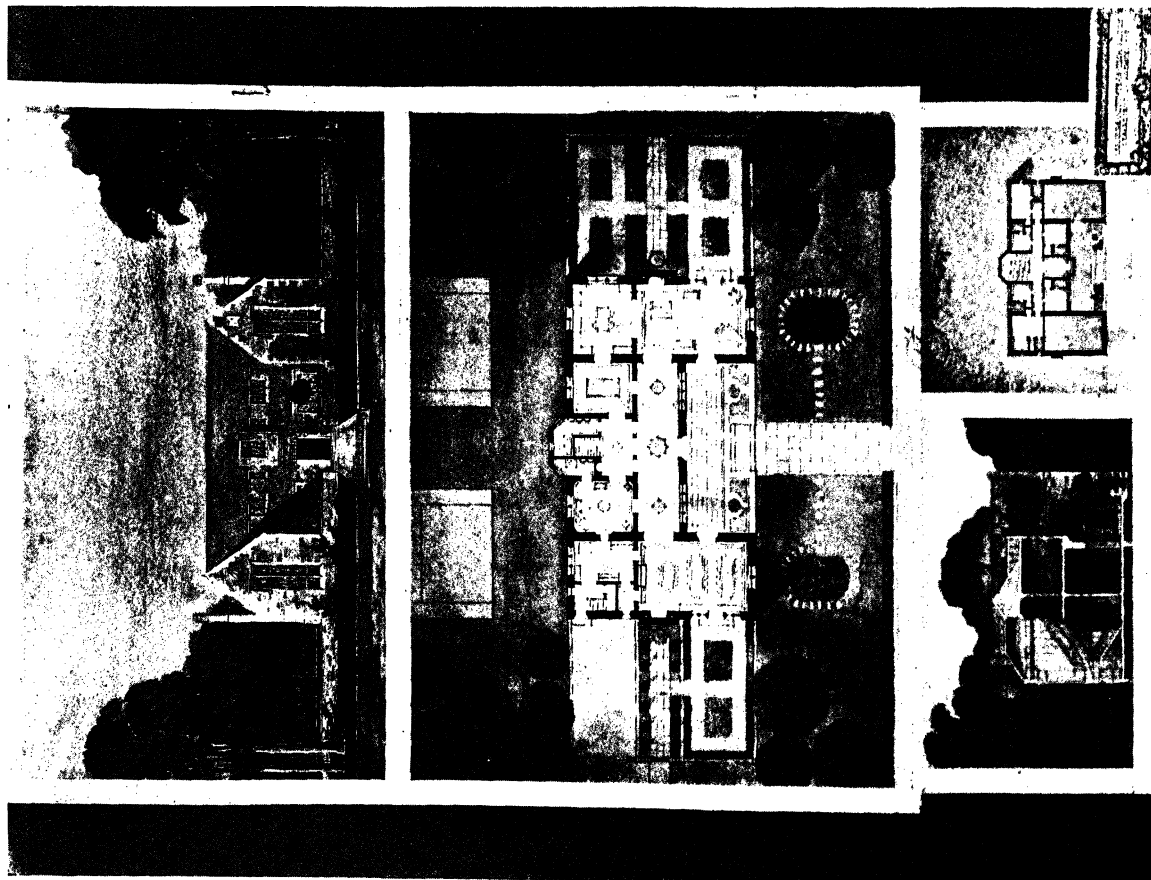
First Mention Placed

B. G. MARTIN First Mention
A COLLEGE CLUB



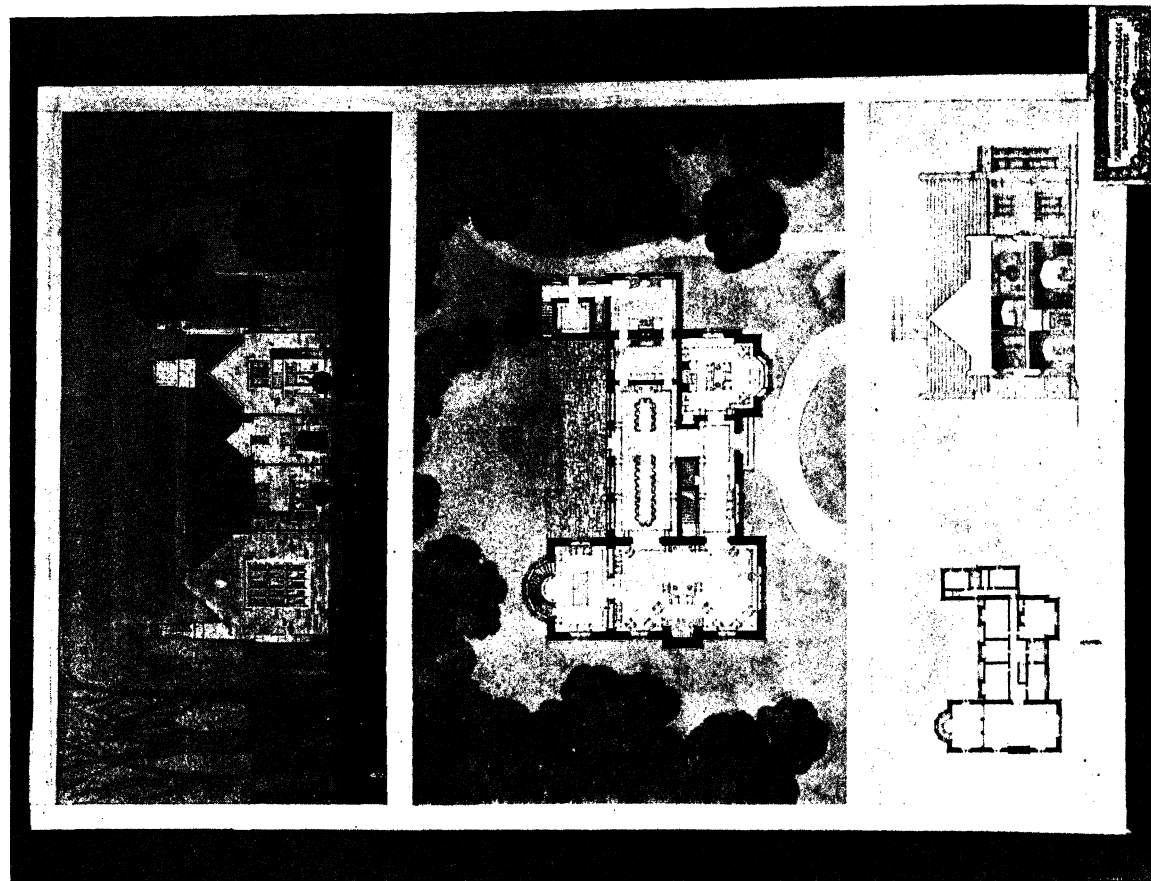
W. Z. BANE

BEAUX ARTS COMPETITIONS



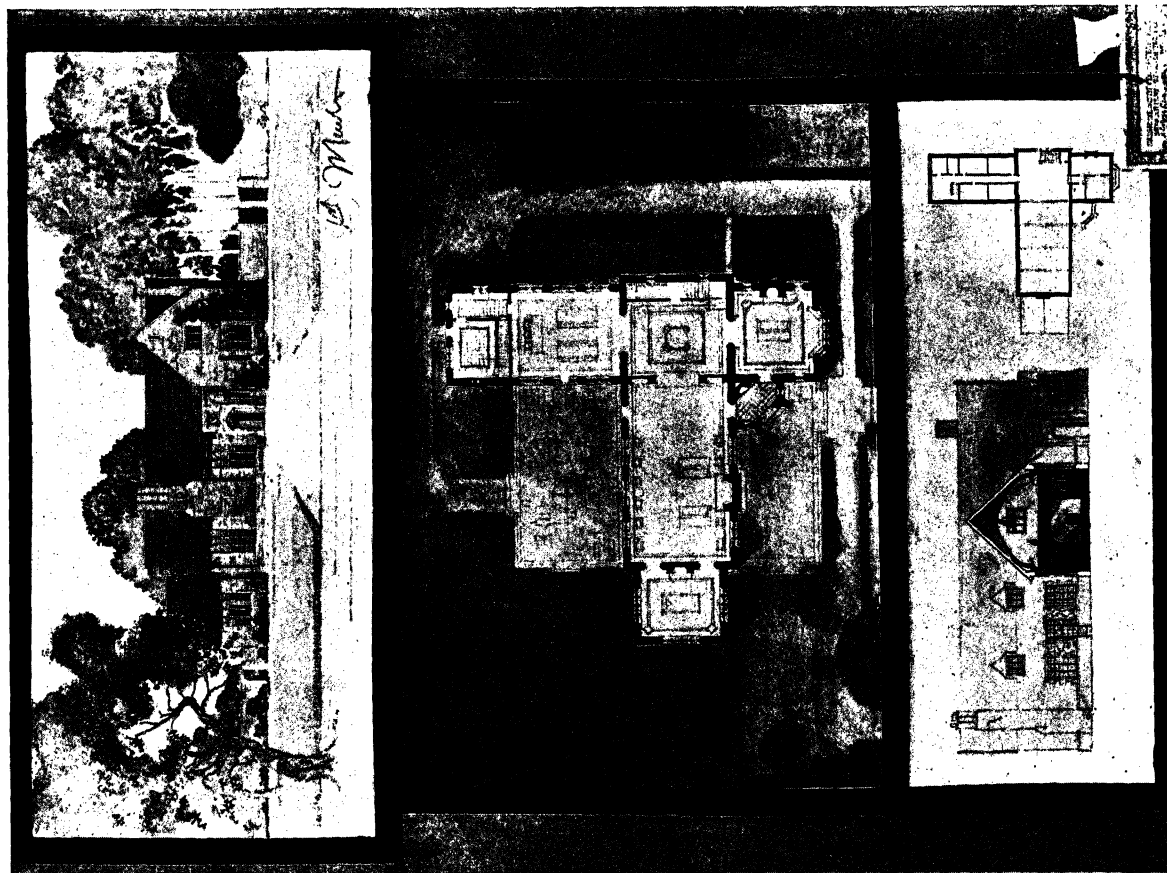
First Mention

E. M. GEARHART First Mention
A COLLEGE CLUB



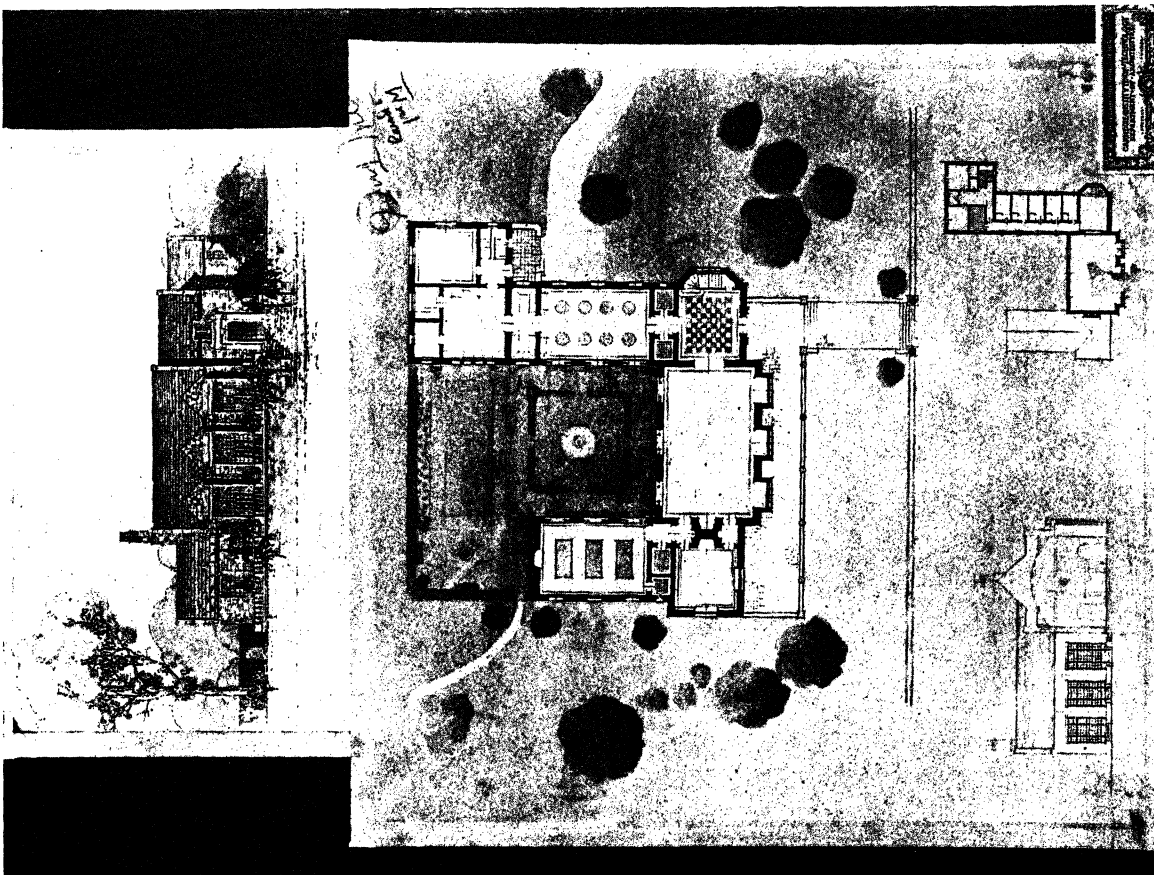
A. D. REID

BEAUX ARTS COMPETITIONS



First Mention

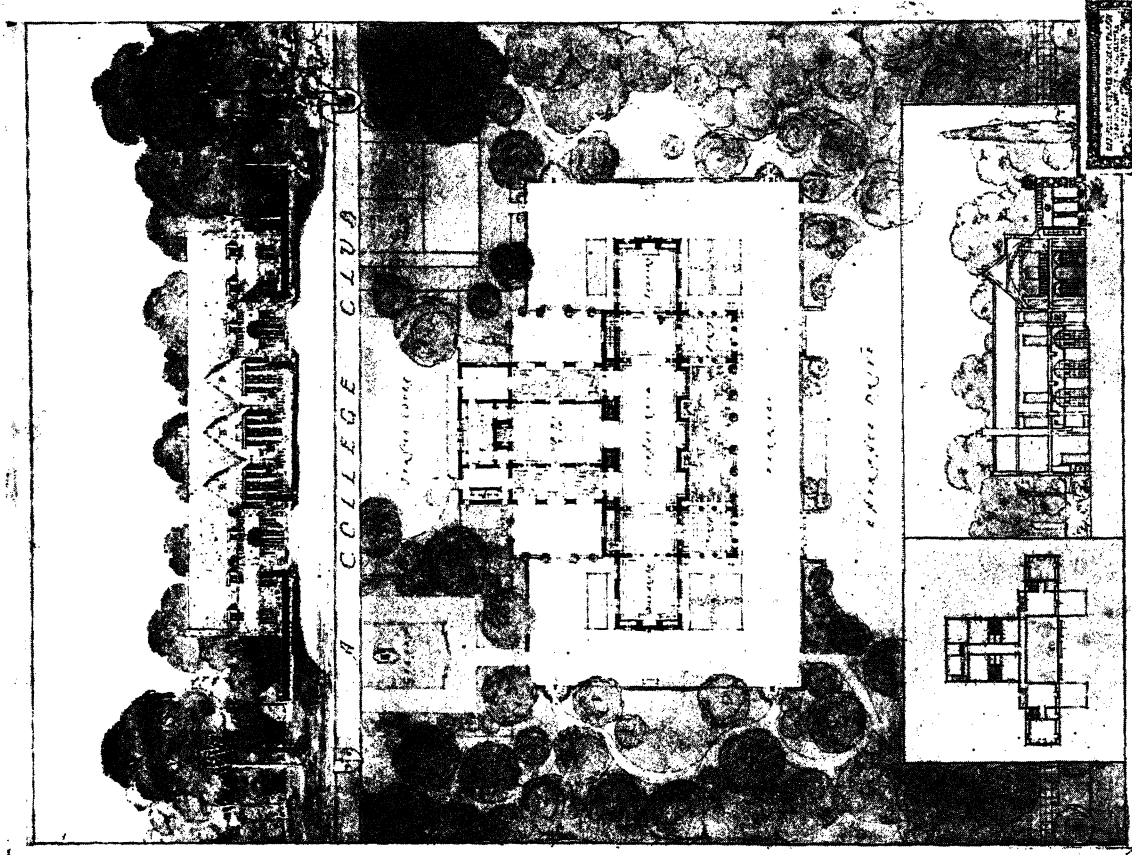
W. C. PYLE
A COLLEGE CLUB



Second Mention
A COLLEGE CLUB

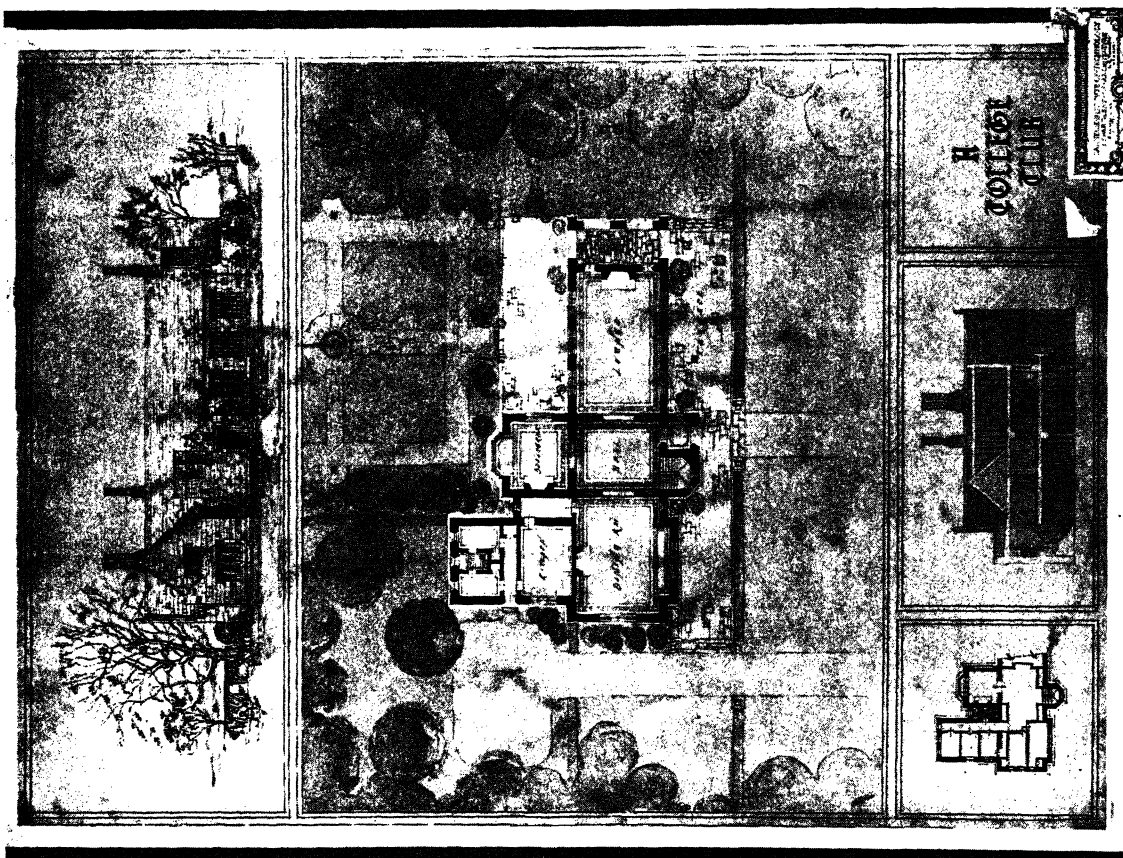
ELIZABETH BURKHARDT

BEAUX ARTS COMPETITIONS



First Mention

J. F. TAYLOR
A COLLEGE CLUB



First Mention
A COLLEGE CLUB

L. R. TURCOTTE

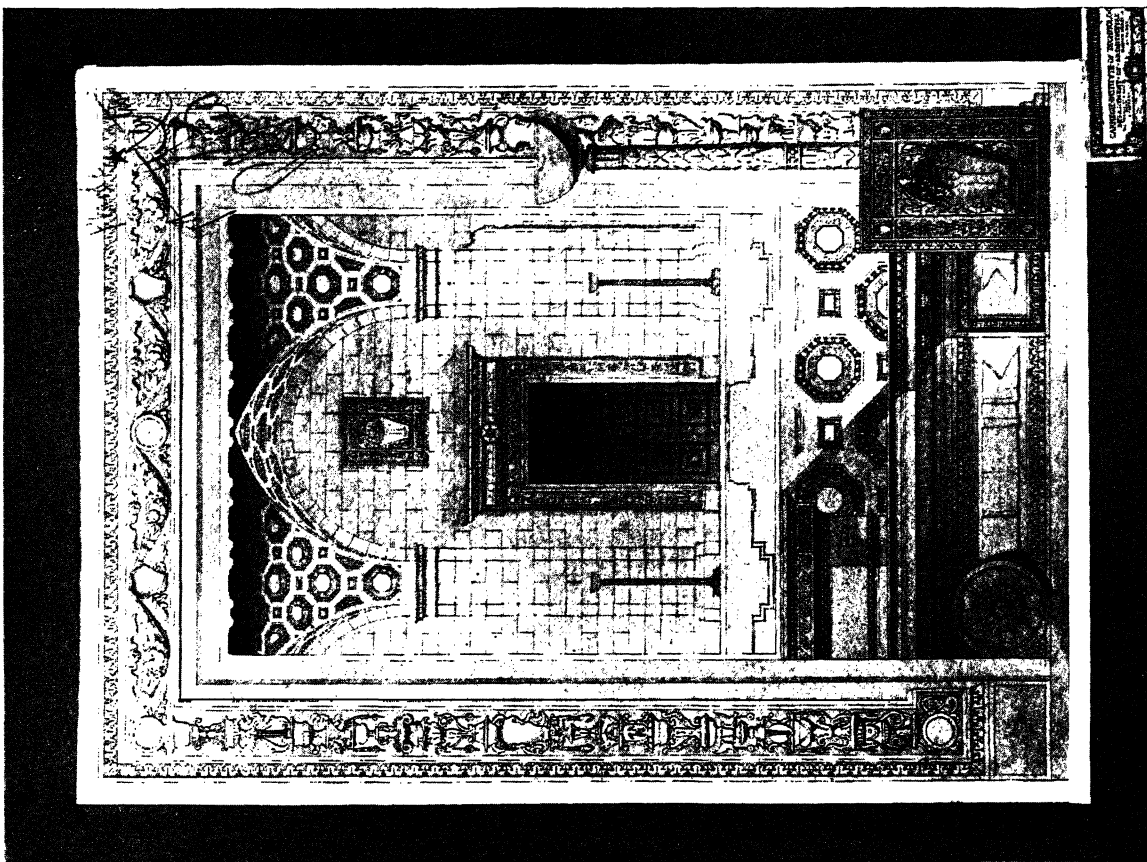
BEAUX ARTS COMPETITIONS



First Mention

A BANK

J. R. REED

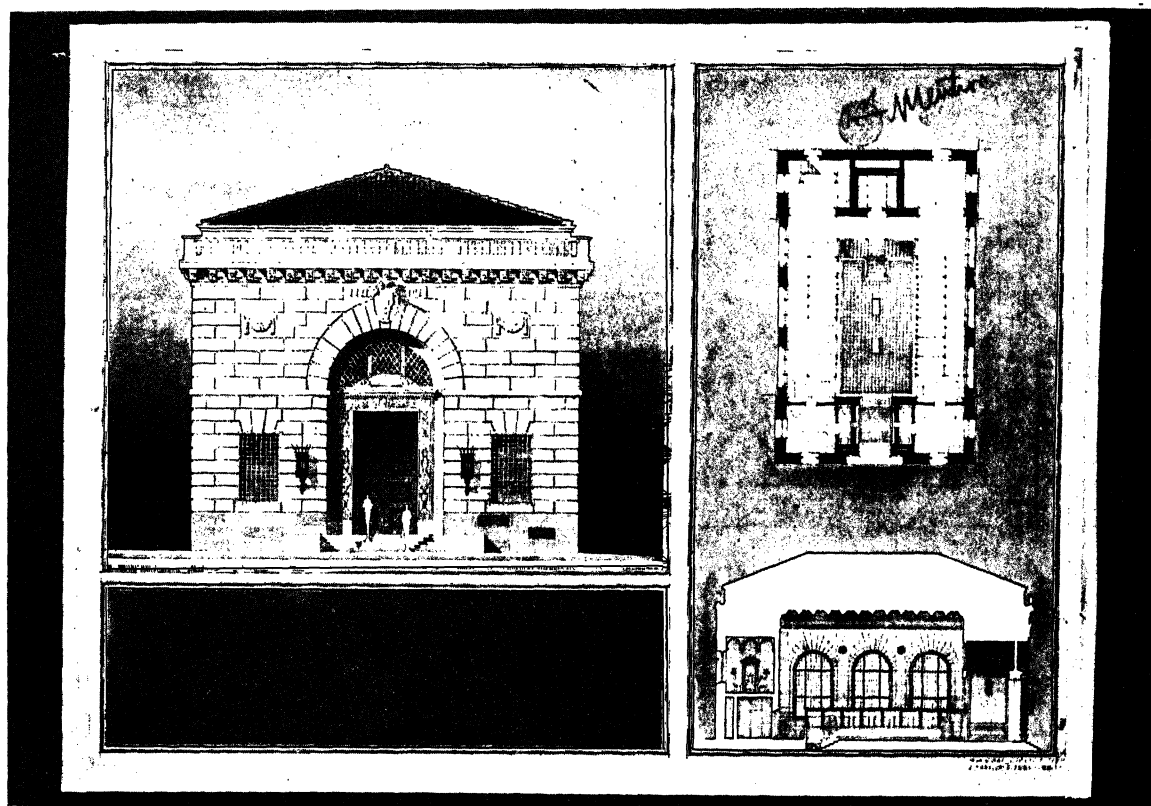


First Mention Placed

A DOORWAY TO A MUSEUM

W. A. STAPLES

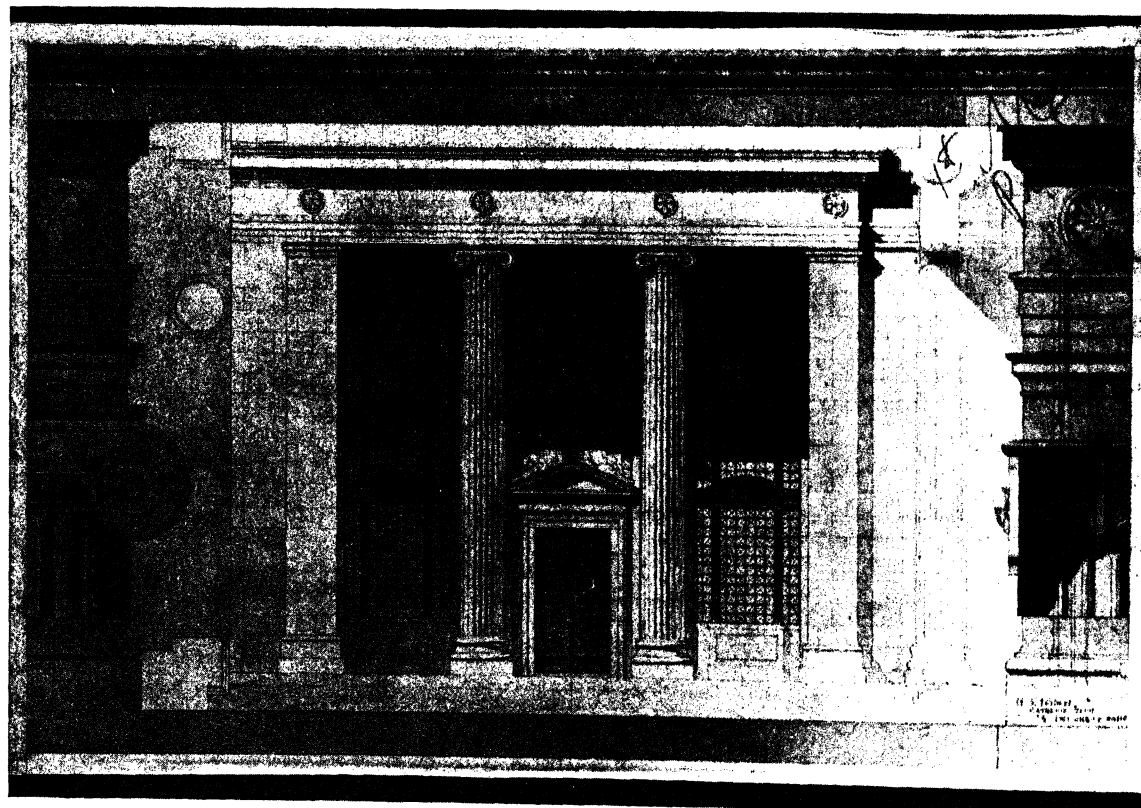
BEAUX ARTS COMPETITIONS



First Mention

A BANK

W. W. HIBBS

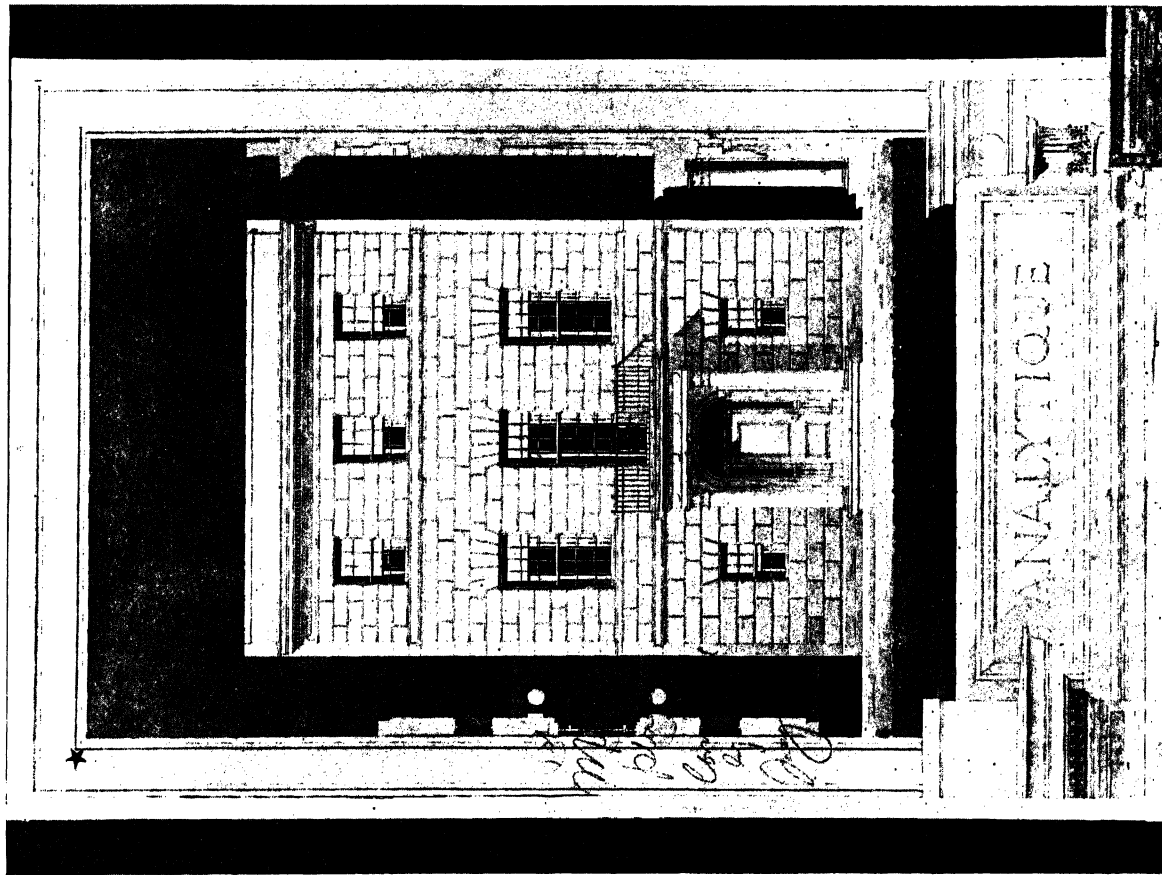


First Mention Placed

A TWO STORY PORTICO

H. S. TORBERT

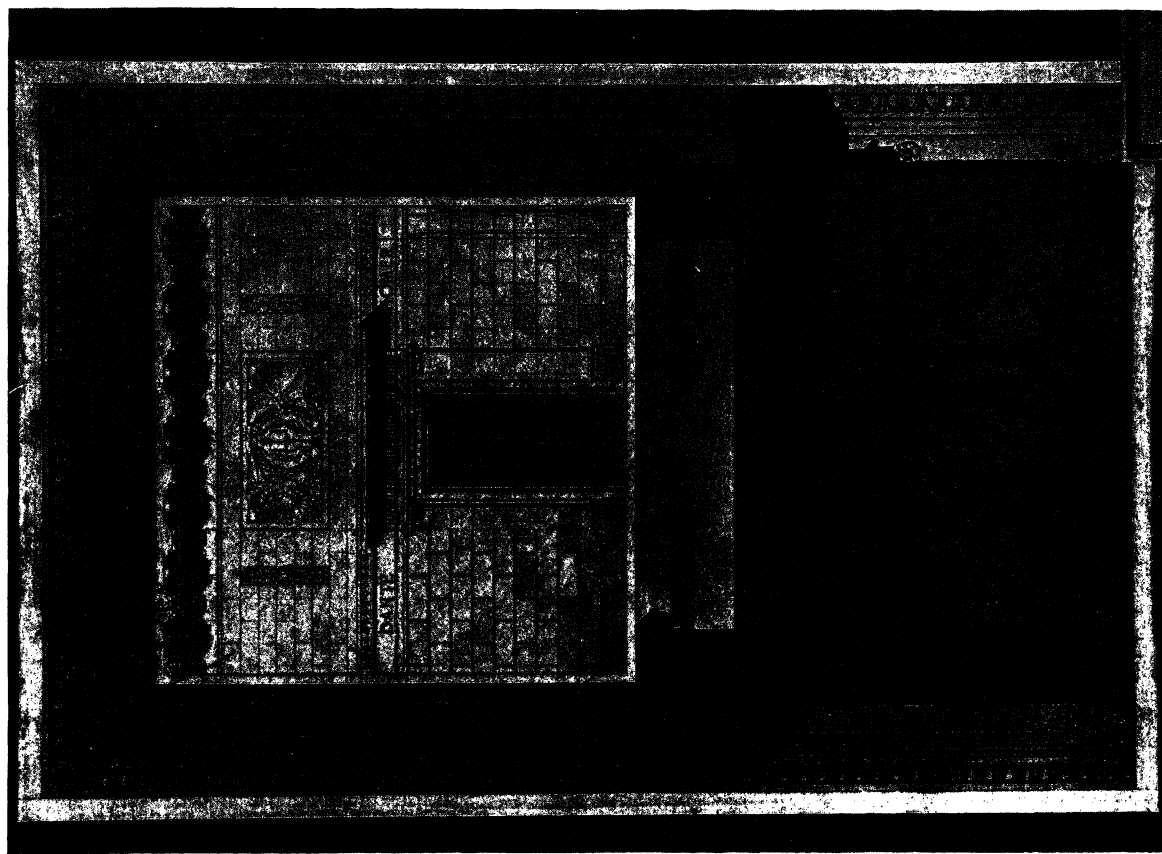
BEAUX ARTS COMPETITIONS



First Mention Placed

A FACADE OF A PRIVATE RESIDENCE

H. I. LYNCE

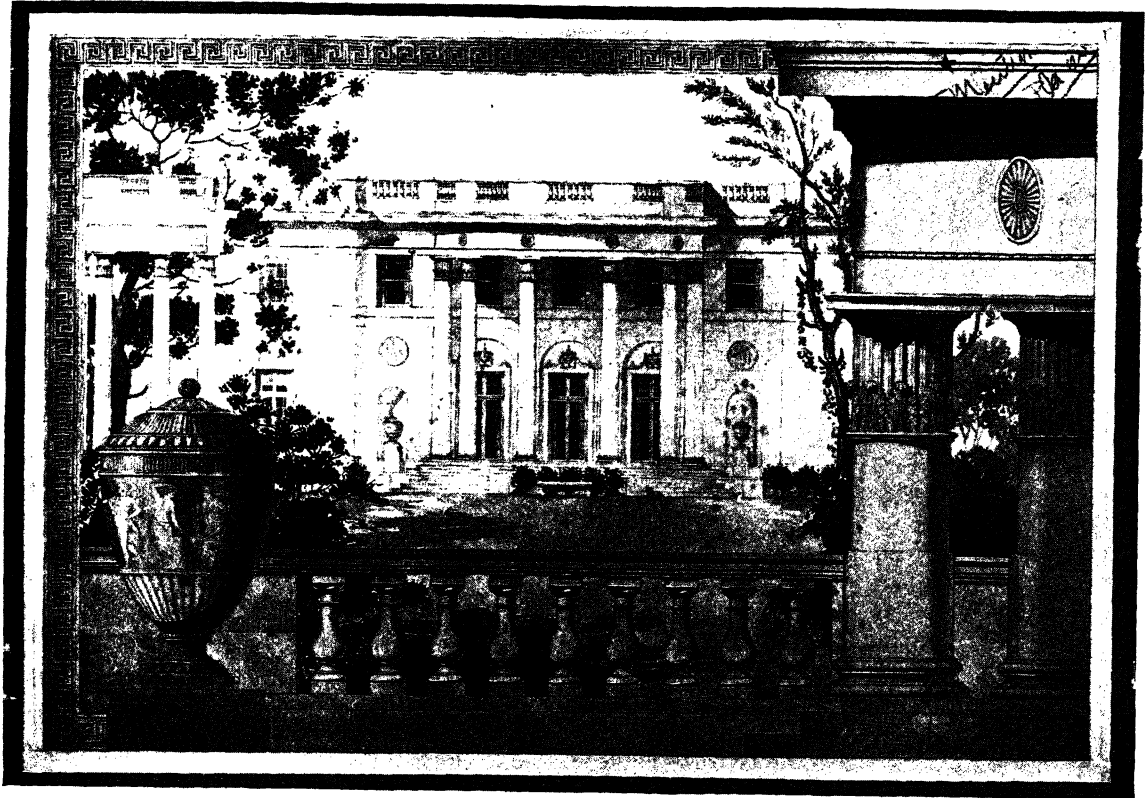


First Mention Placed

A DOORWAY TO A MUSEUM

H. B. TROSS

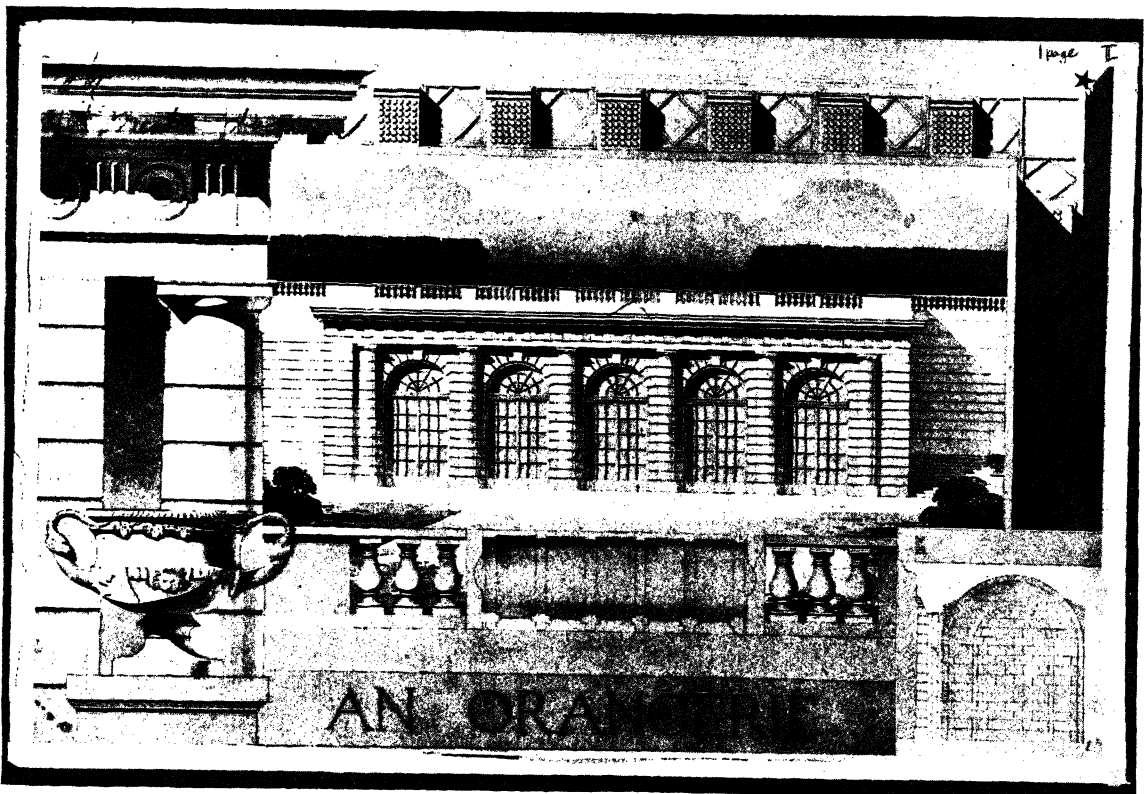
BEAUX ARTS COMPETITIONS



First Mention Placed

A SEMICIRCULAR PORTICO

J. J. KEIL



First Mention Placed

AN ORANGERIE

VICTOR TILLBROOK

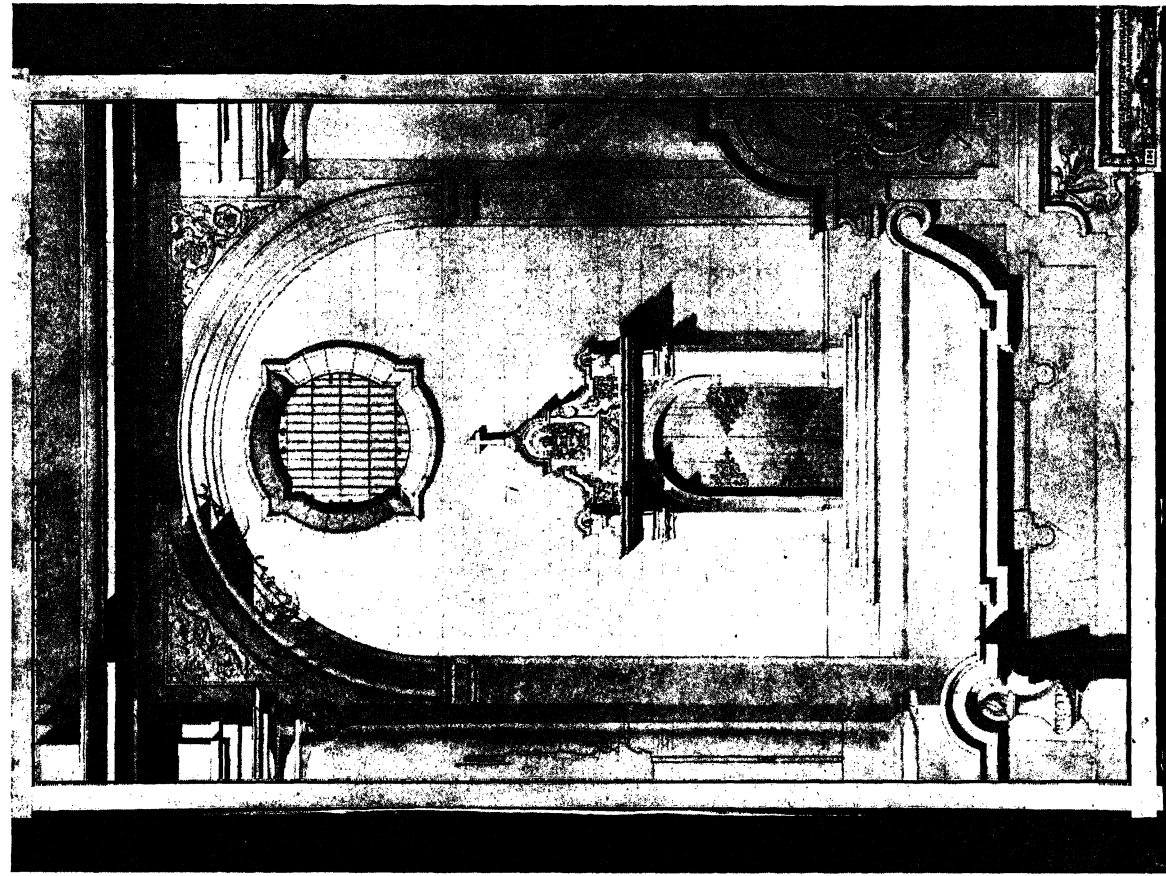
BEAUX ARTS COMPETITIONS



First Mention Placed

A SEMICIRCULAR PORTICO

K. H. SNYDER

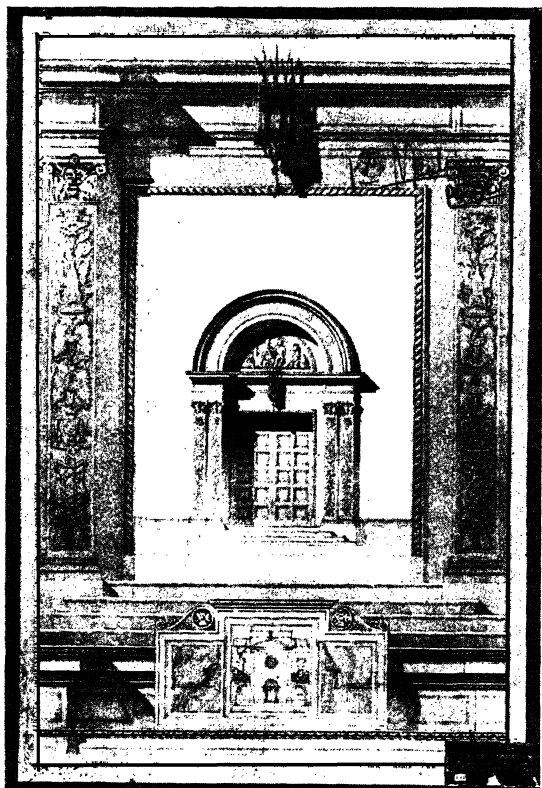


First Mention Placed

A SIDE ENTRANCE TO A CHURCH

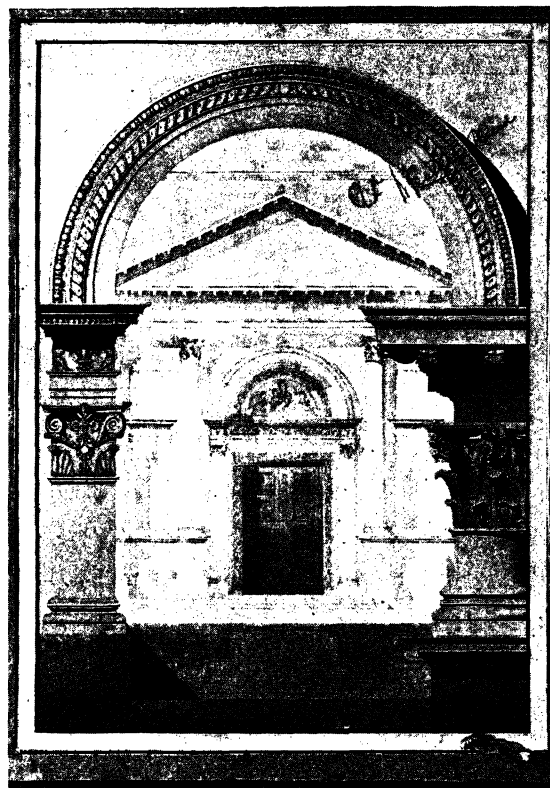
P. C. REED

BEAUX ARTS COMPETITIONS



First Mention Placed

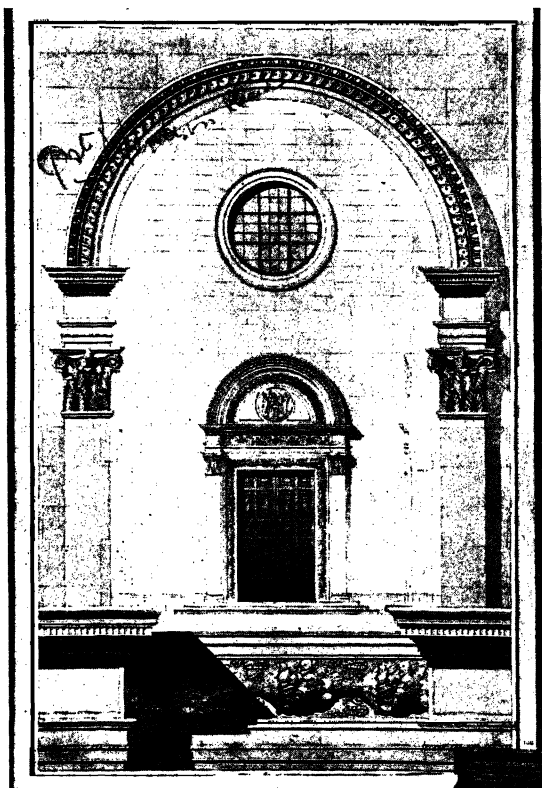
RODY PATTERSON



First Mention Placed

C. F. BOWERS

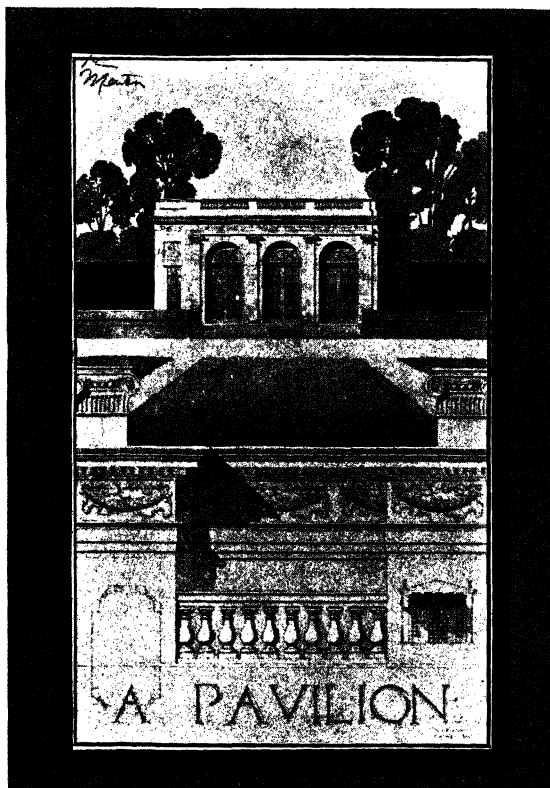
A SIDE ENTRANCE TO A CHURCH



First Mention Placed

H. A. PAGE

A SIDE ENTRANCE TO A CHURCH



First Mention

C. O. GARLAND

A PAVILION

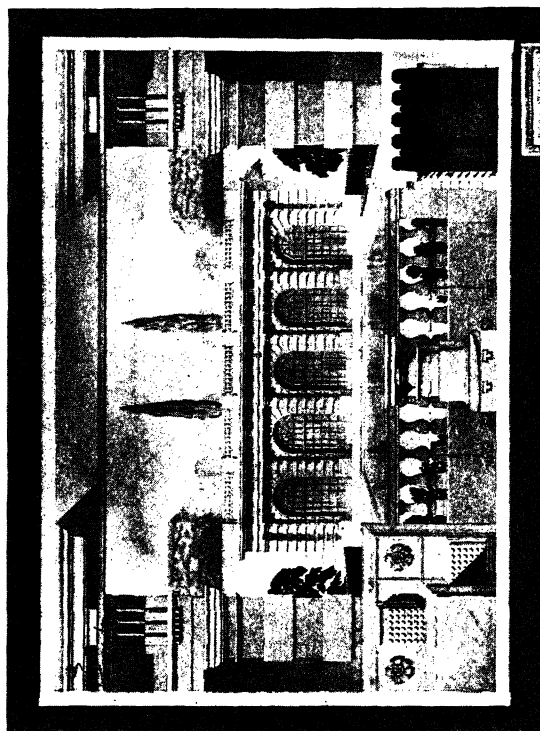
BEAUX ARTS COMPETITIONS



Second Mention

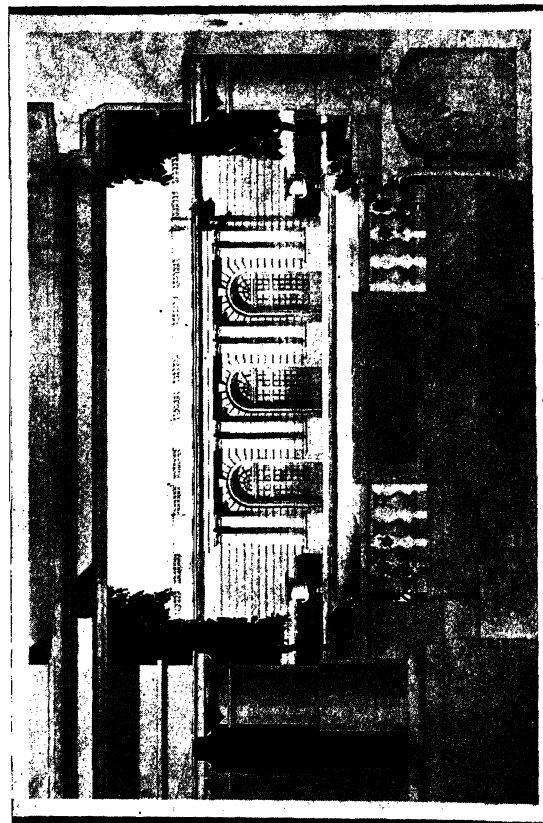
W. F. KOPPEL

AN ORANGERIE



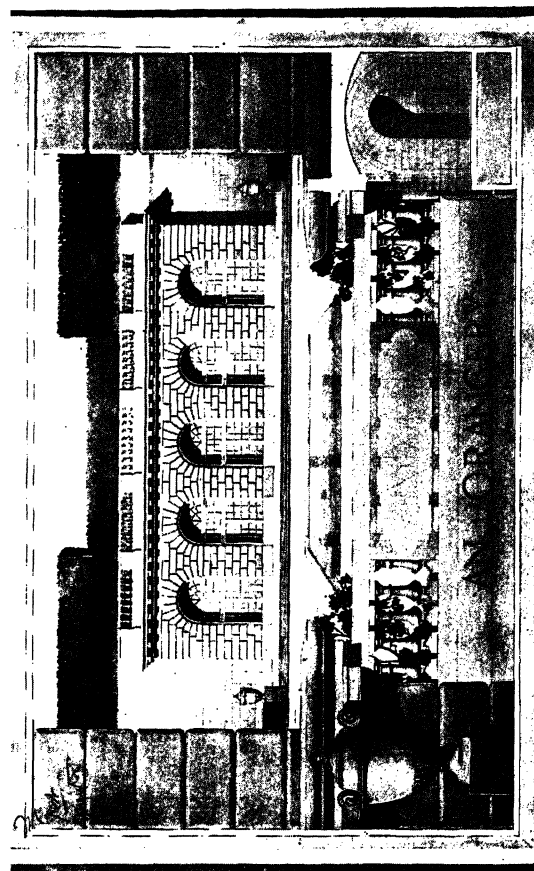
First Mention

A. K. GOERING



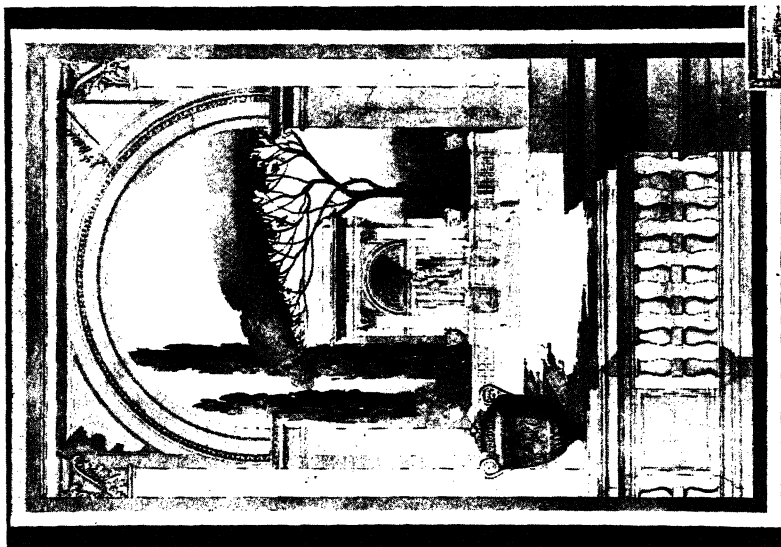
First Mention

H. C. LIPPINCOTT, JR

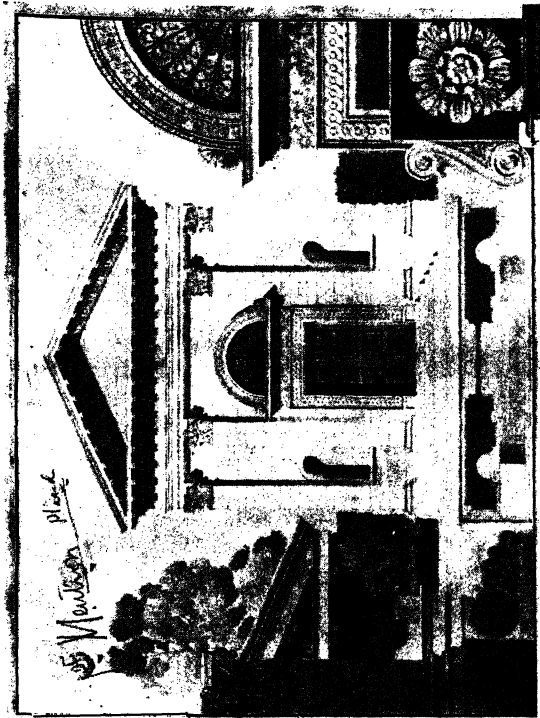


First Mention

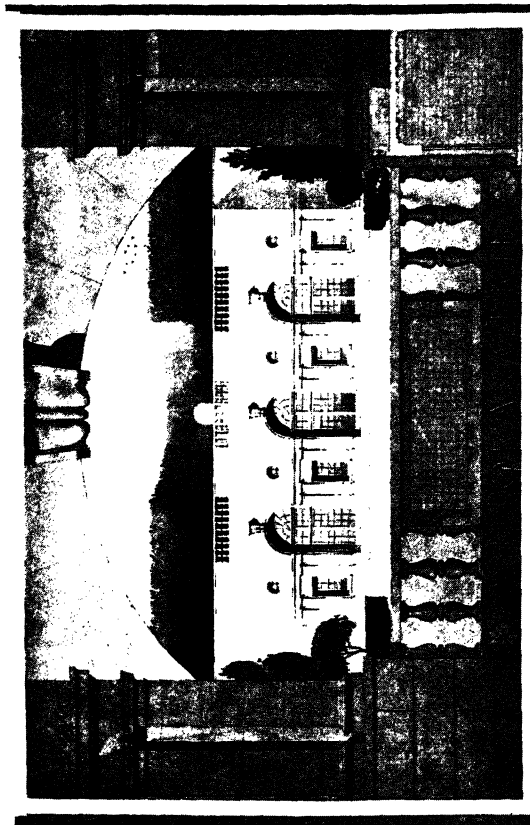
D. S. GARDER



First Mention
K. O. SONNEMAN
A COMMEMORATIVE MONUMENT



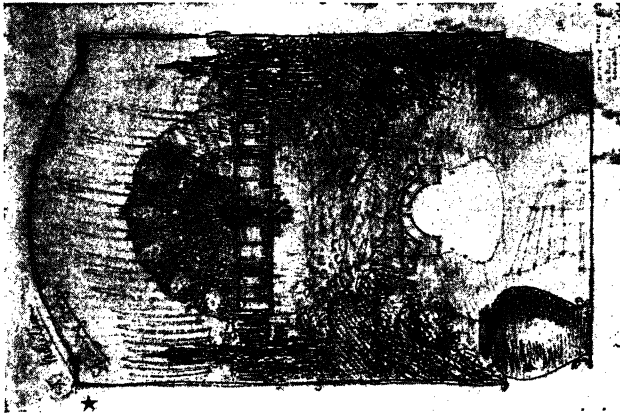
First Mention Placed
J. N. FRANKLIN
A SIDE ENTRANCE TO A CHURCH



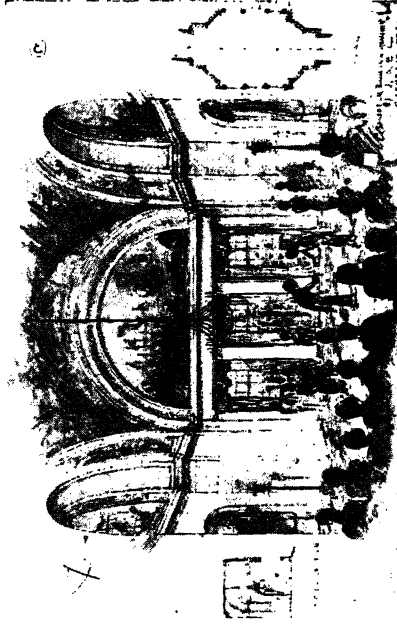
First Mention
AN ORANGERIE
G. A. DEACON



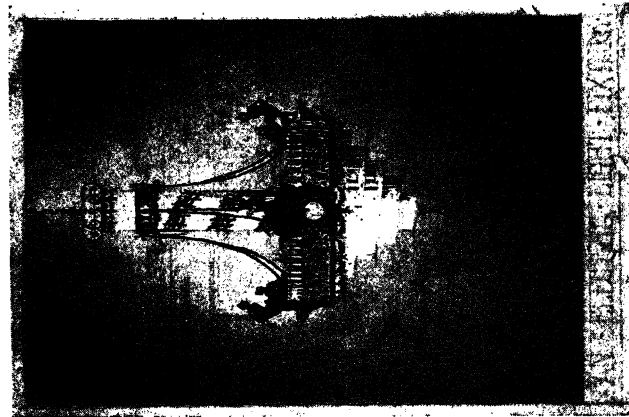
W. M. BURKE
A WAITING PAVILION



G. N. PAULY
SPIERING PRIZE WINNER



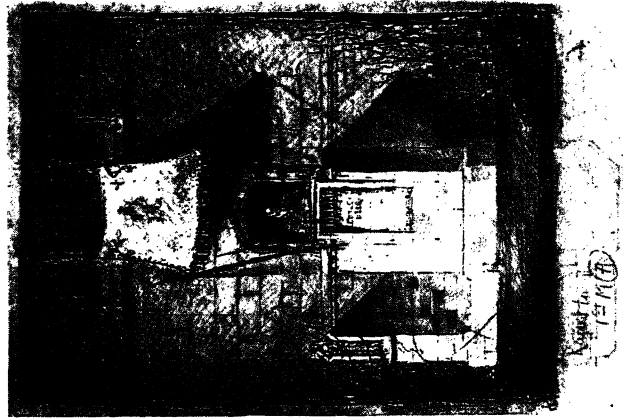
J. J. KEIL
A RECEPTION ROOM ON A STEAMSHIP PIER



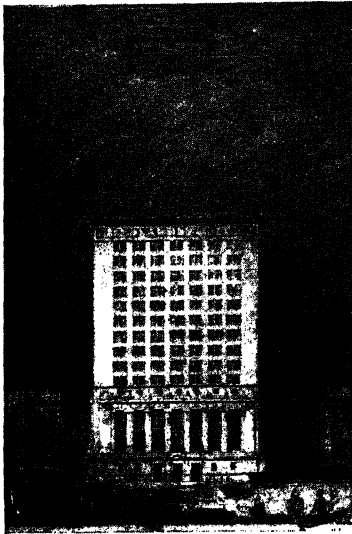
G. H. SORBER
PUPIN PRIZE WINNER



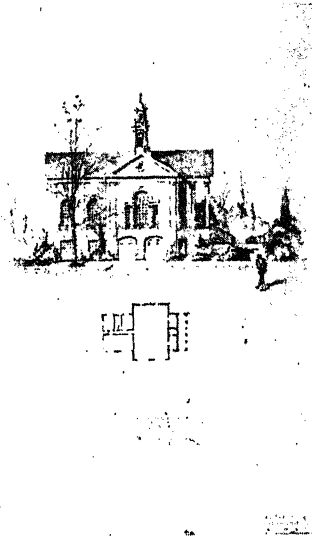
PAUL F. SIMPSON
A HOTEL
ESQUISSE-ESQUISSE



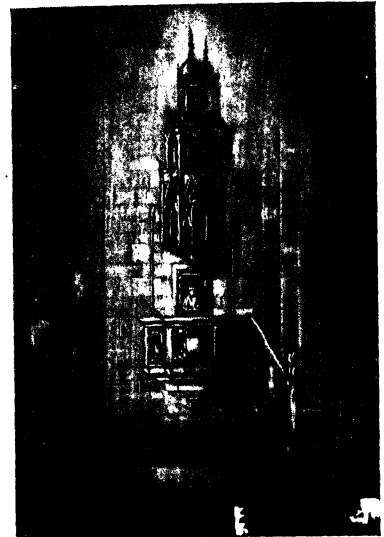
E. O. ANDERSON
OPEN AIR PULPIT



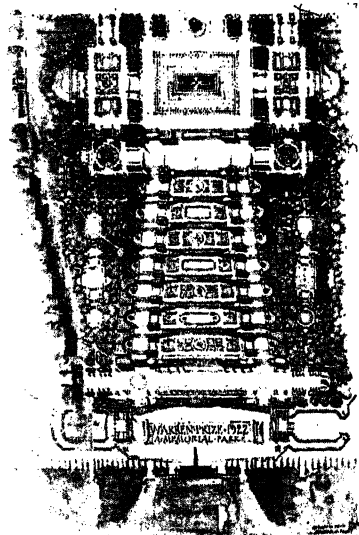
R. S. SIMPSON
Preliminary Sketch for 22nd Stewardson
Competition
A BANK AND OFFICE BUILDING
Placed First



W. A. STAPLES
A VILLAGE FIRE STATION

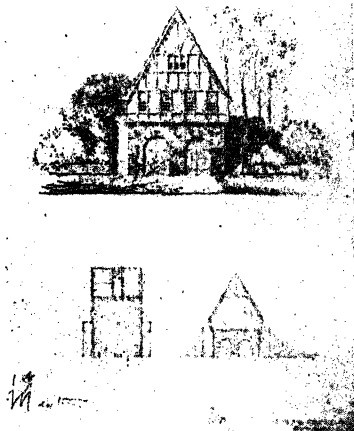


C. J. PELLEGRINI
AN OPEN AIR PULPIT



G. N. PAULY
A MEMORIAL PARK

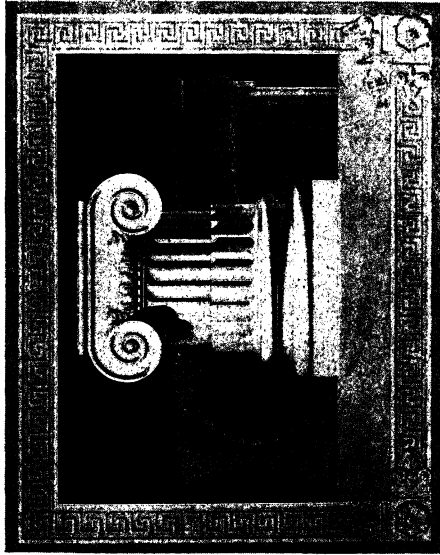
ESQUISSE-ESQUISSE



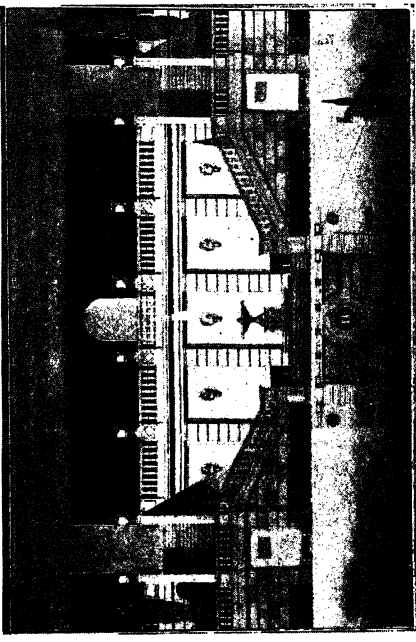
G. A. BRINK
A VILLAGE FIRE STATION



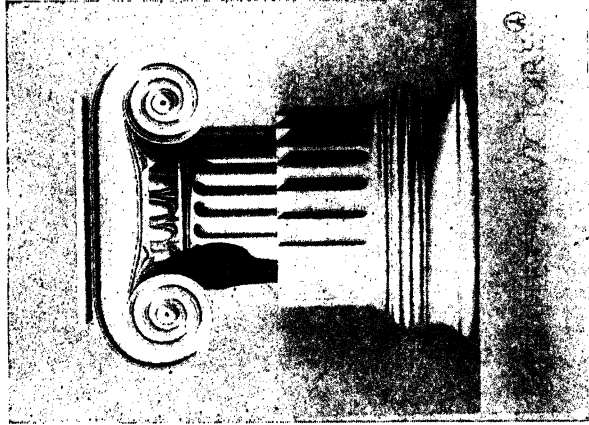
J. J. KEIL
A RECREATION PIER



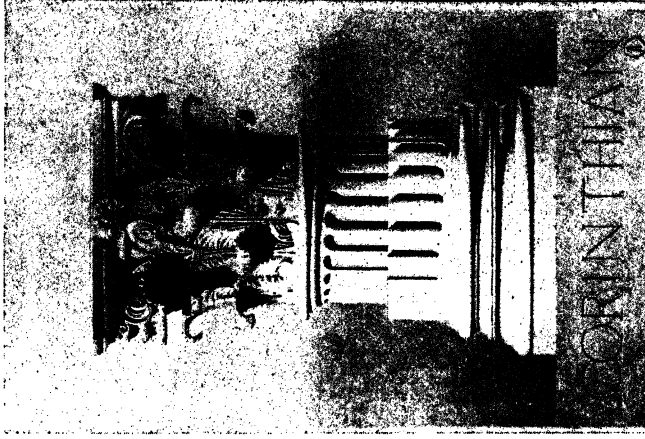
E. O. ANDERSON



H. W. DAKON

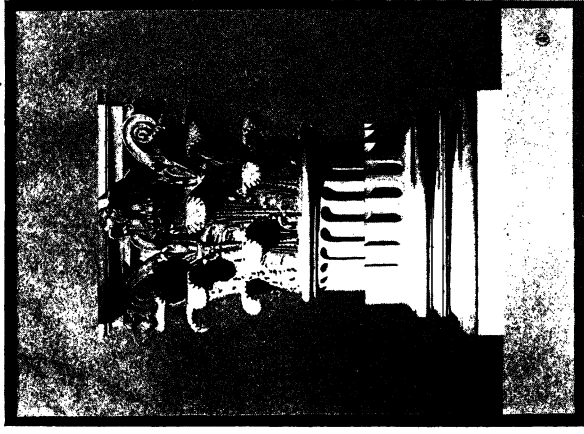


R. H. CUTTING

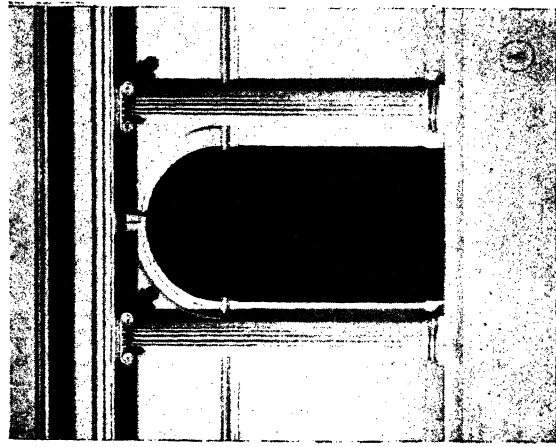


J. F. GLOVER

FRESHMAN WORK



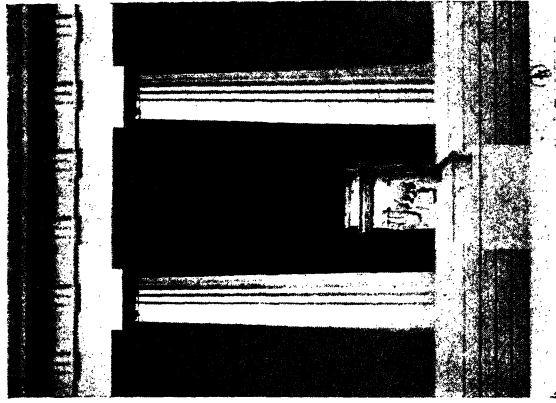
JAMES PAUL



J. F. PALUMBO



R. J. KENNEDY

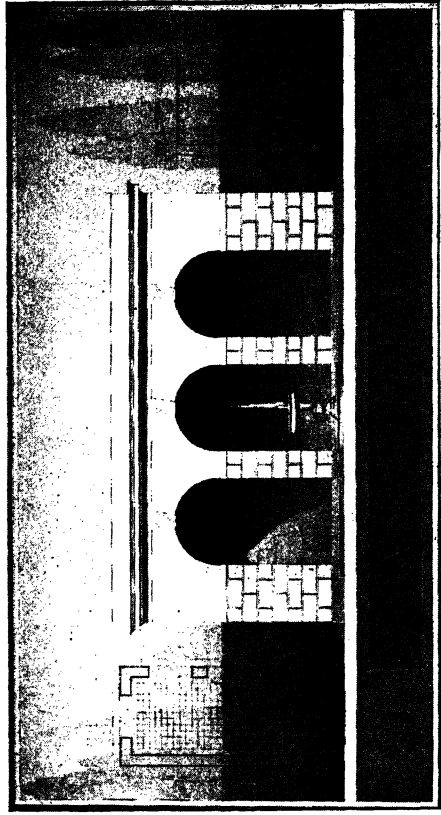


D. K. MORRISON

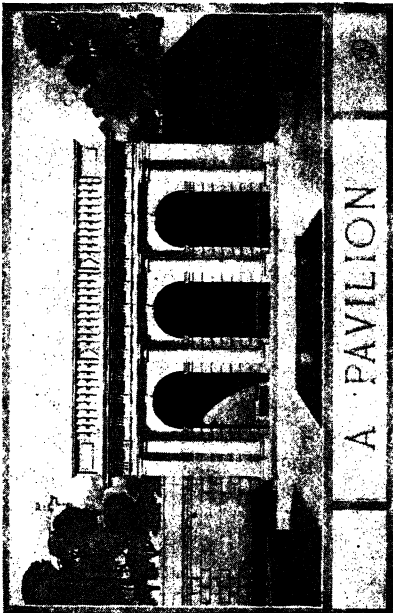
FRESHMAN WORK



J. C. FISHER



M. N. GOODWIN



E. G. WHEELER

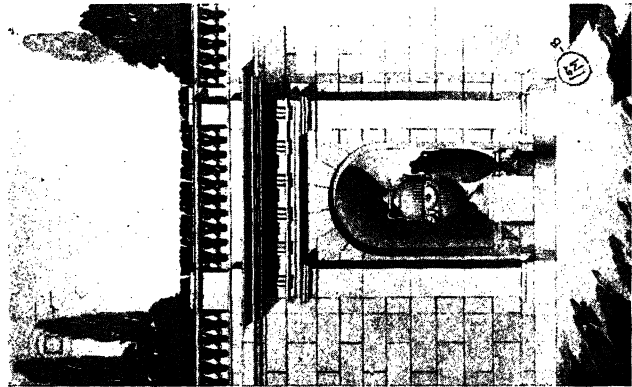


J. TILLOTSON

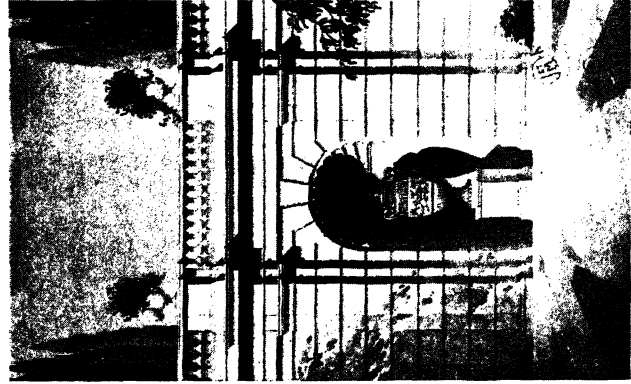


R. H. CUTTING

FRESHMAN WORK



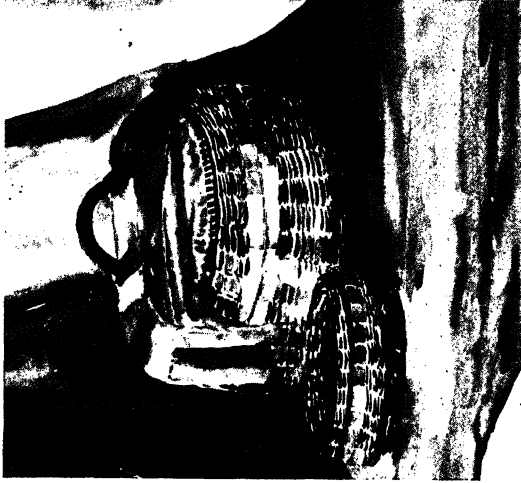
J. P. CROWGEY



A. D. REID

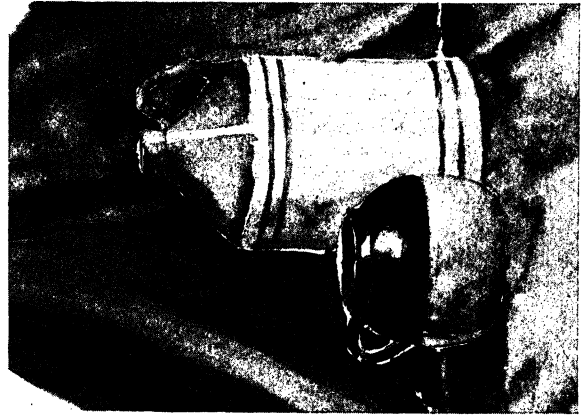


E. O. ANDERSON

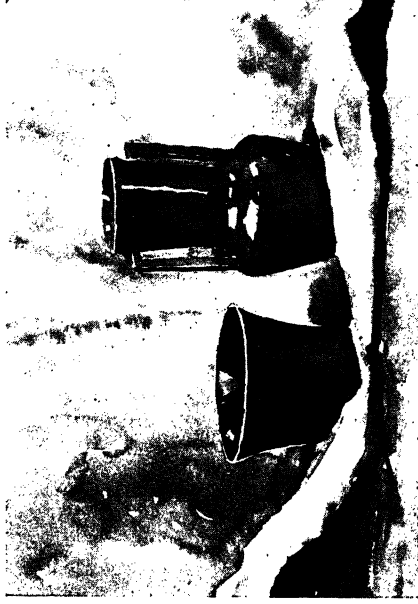


D. D. MCGERVEY

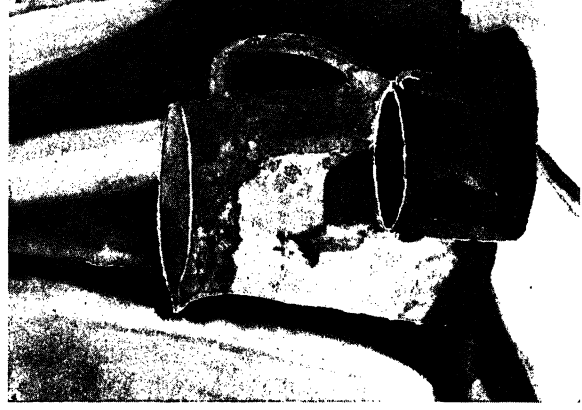
WATER COLOR



C. P. ZIMMERS



J. W. EVERHARD



F. O. RENNISON



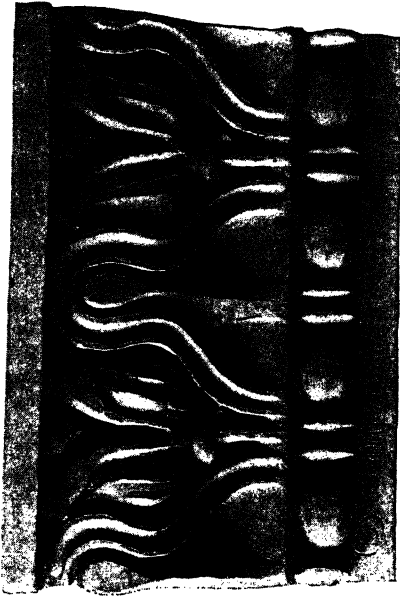
C. J. PELLEGRINI



E. O. ANDERSON



R. W. SCHIMERTZ



G. A. FRINK

CLAY MODELING



J. G. TODD



C. J. PELLEGRINI



G. A. BRINK



P. C. Reed



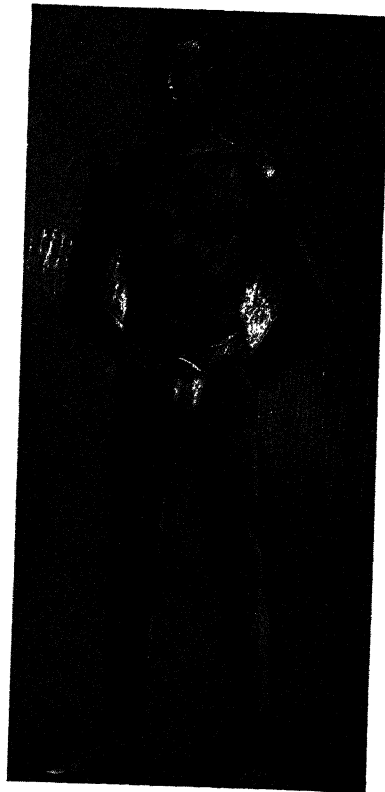
G. N. PAULY

LIFE DRAWING

P. C. REED



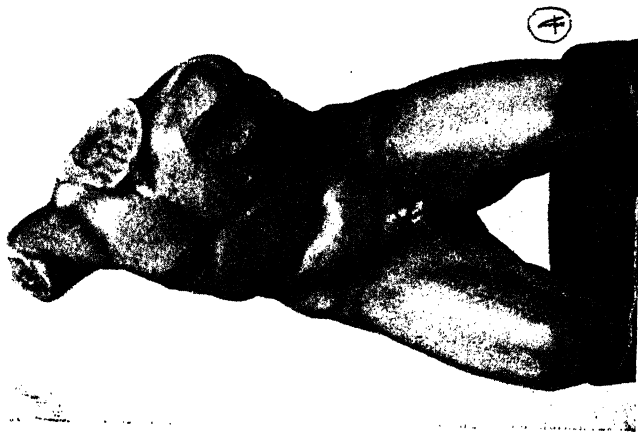
P. C. REED



J. N. FRANKLIN



C. E. LANDEFELD



G. A. BRINK

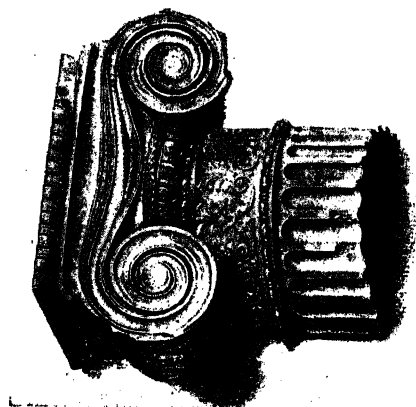


E. O. ANDERSON

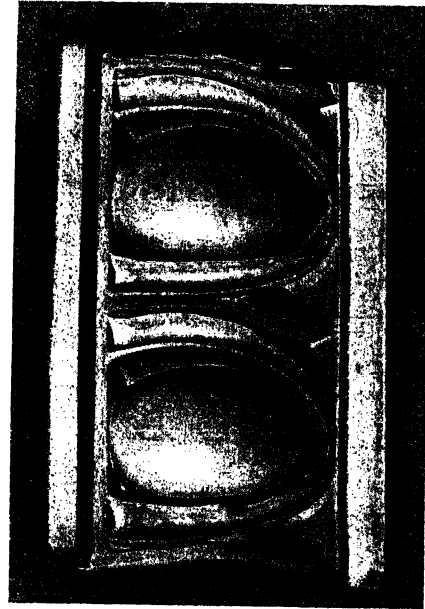
CAST FIGURES



G. A. BRINK

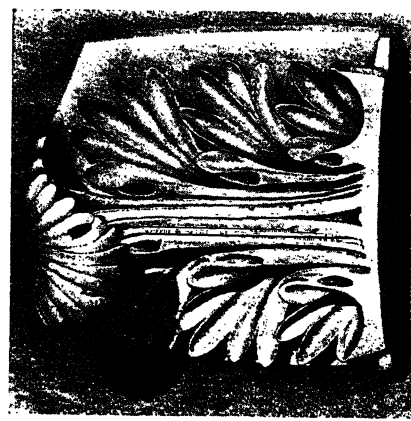


A. D. REID

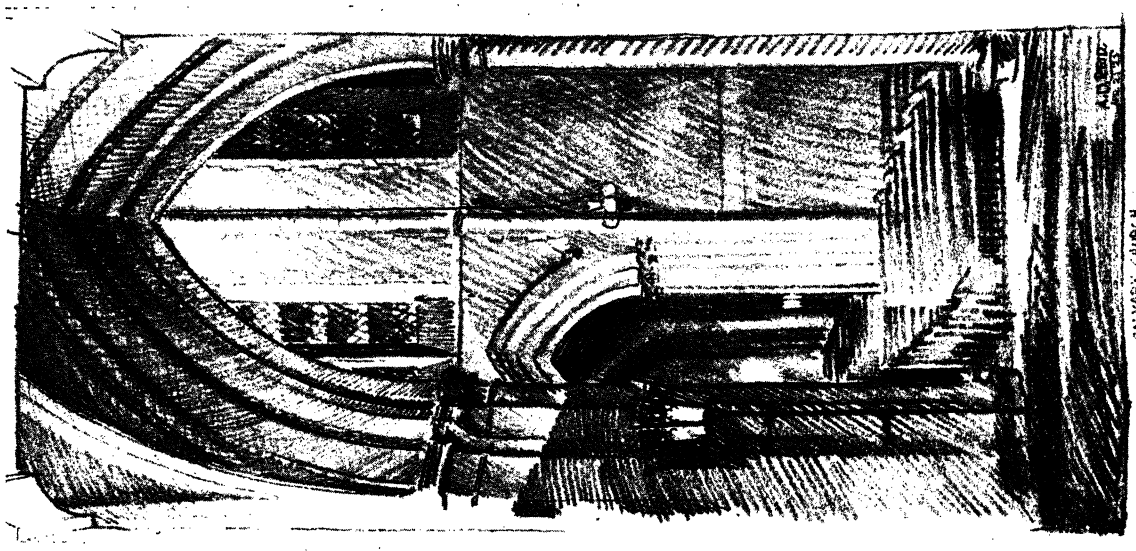


J. F. PALUMBO

CAST ORNAMENT



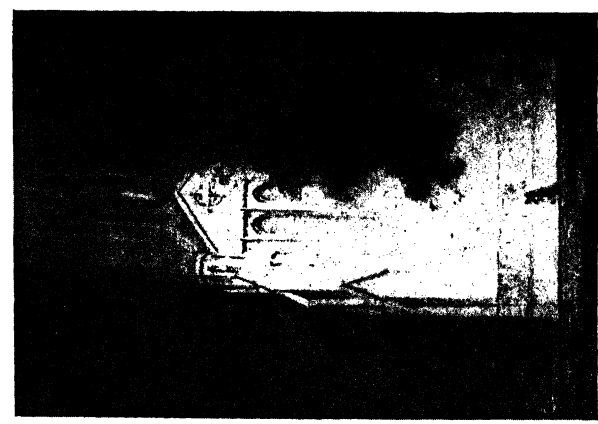
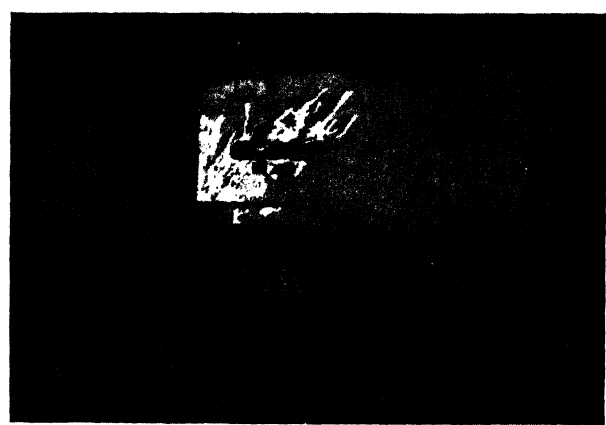
J. F. PALUMBO



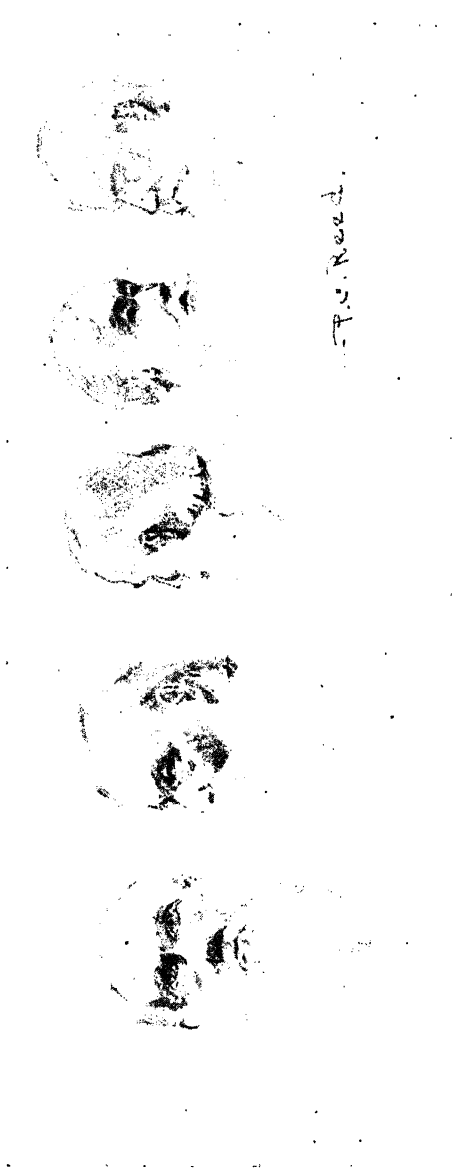
A. D. REID

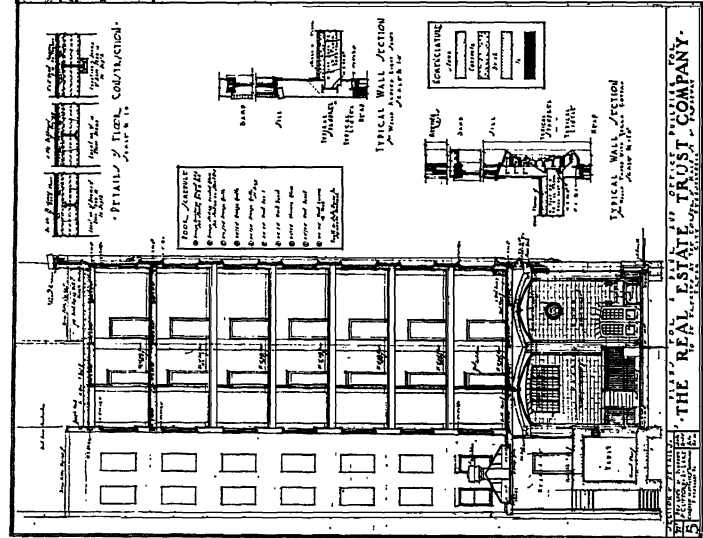
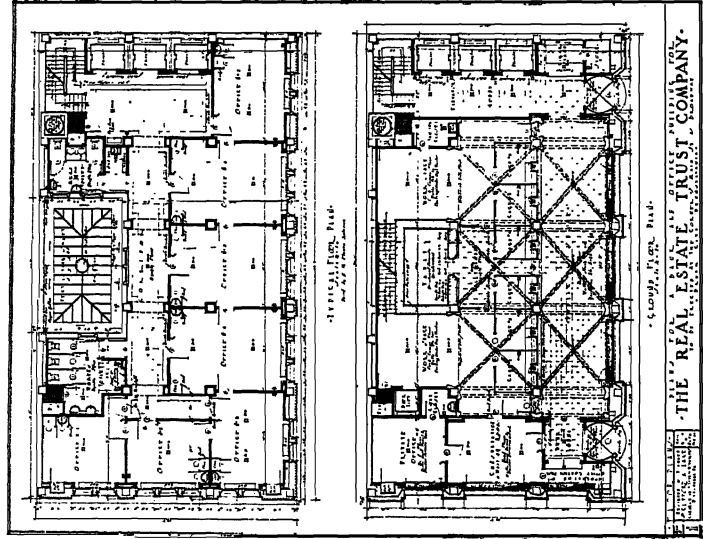
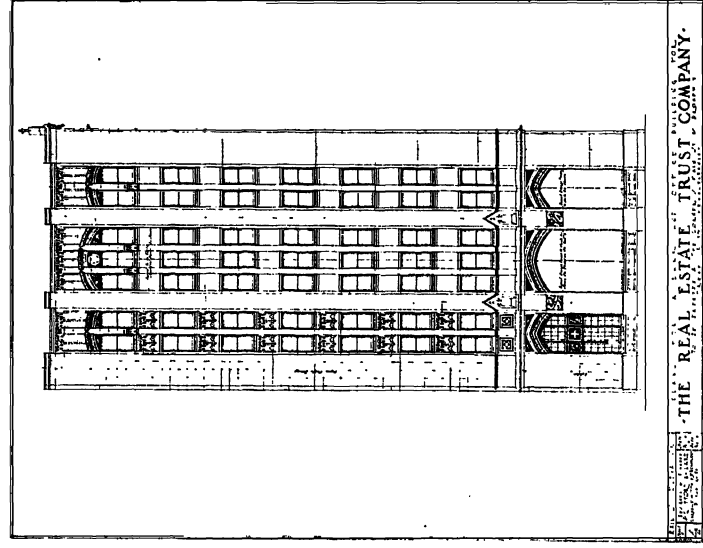
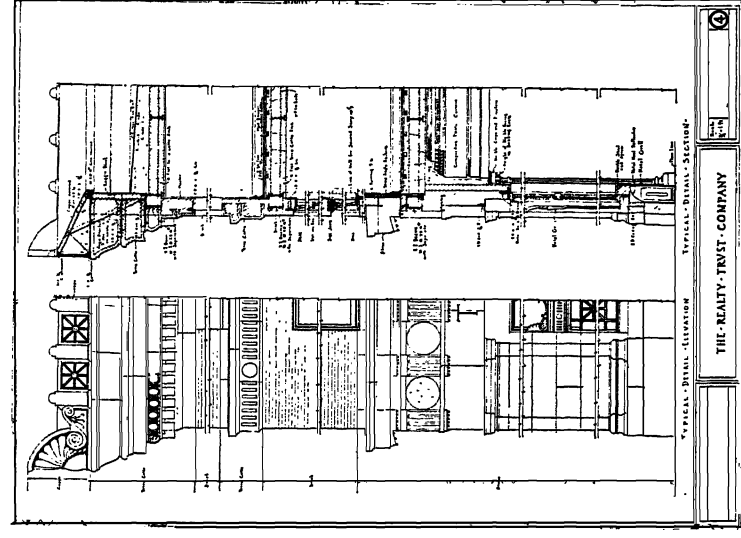
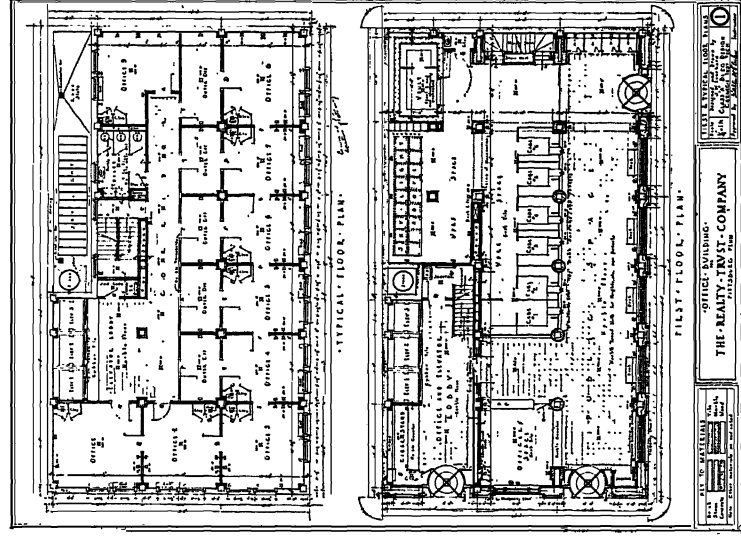
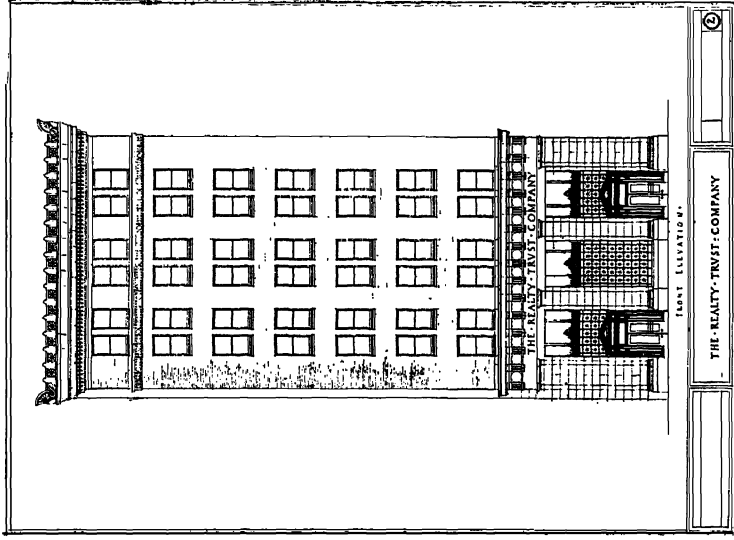
SKETCHES

W. A. STAPLES

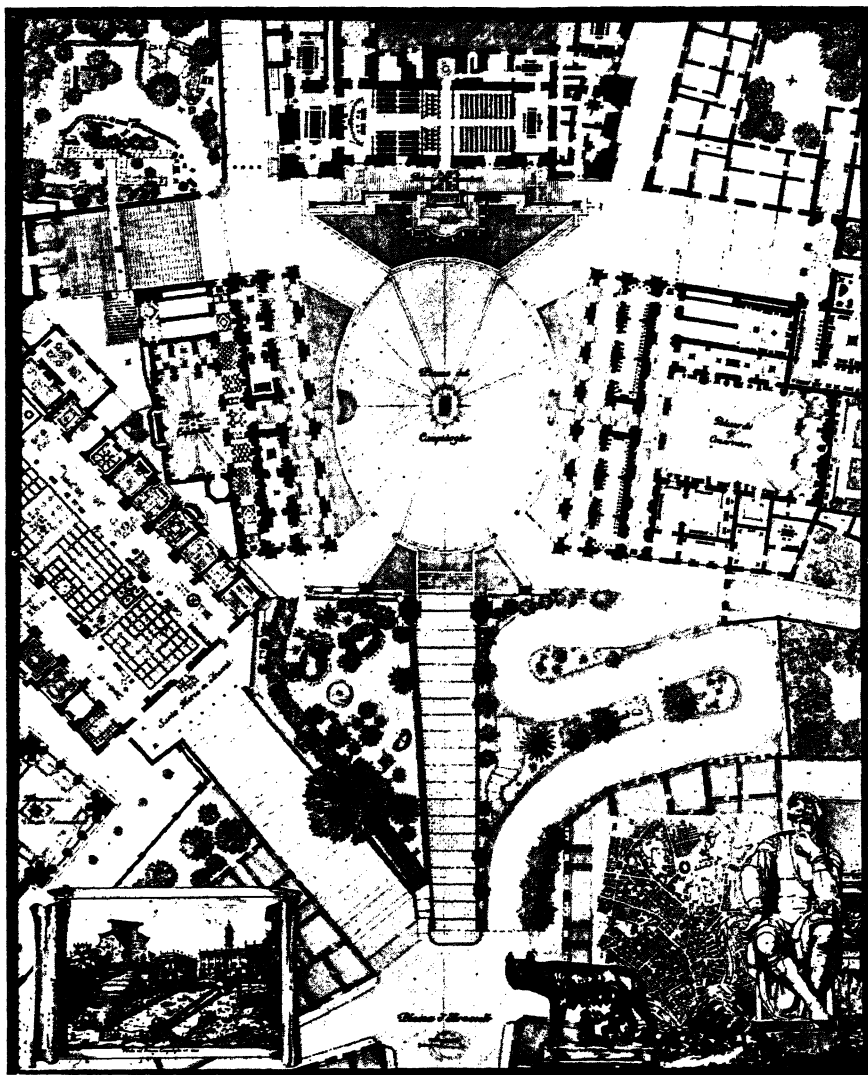


P. C. REED





J. W. EVERHARD



MEASURED DRAWING OF THE CAPITOL AT ROME

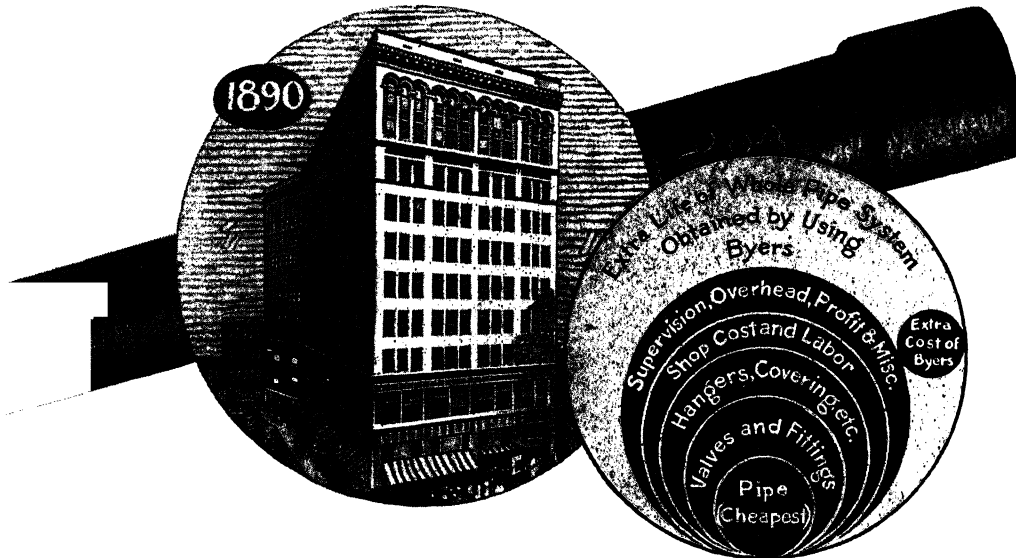
H. L. RUBIN

Advertising Section

BYERS PIPE

GENUINE WROUGHT IRON

1. Old Garfield Bldg., Cleveland, Ohio. Erected 1890. Byers pipe in heating system, still in excellent condition.



2. New Public Library, Detroit, Mich. Architect: Charles Gilbert, New York City. Byers pipe installed for plumbing and heating

3. New Real Estate Bldg., Detroit, Mich. Architect: Louis Kamper, Detroit. Byers pipe installed throughout.

Father Time Passes Judgment

THE rust-resistance of a metal cannot be pre-determined by laboratory tests. Only the test of time and service is decisive. So the metallurgist stands aside, waiting for the verdict of Father Time.

The Garfield Building, Cleveland, erected 1890, shown in circle above, furnishes an example of the long life of Byers pipe which is duplicated wherever Byers was installed years ago. The builders of today, profiting by this knowledge, specify and insist on the in-

stallation of Byers pipe above or underground, indoors or out, where the greatest durability is desired at a moderate cost.

The diagram shows the average items of cost in a pipe system. The pipe itself is but a small part of the total cost, and the extra cost of Byers pipe is but 5 or 10% of the total cost of the pipe system. Yet the life of the system depends almost entirely on the rust-resistance of the pipe. For when the pipe fails, the entire investment is lost, and more.

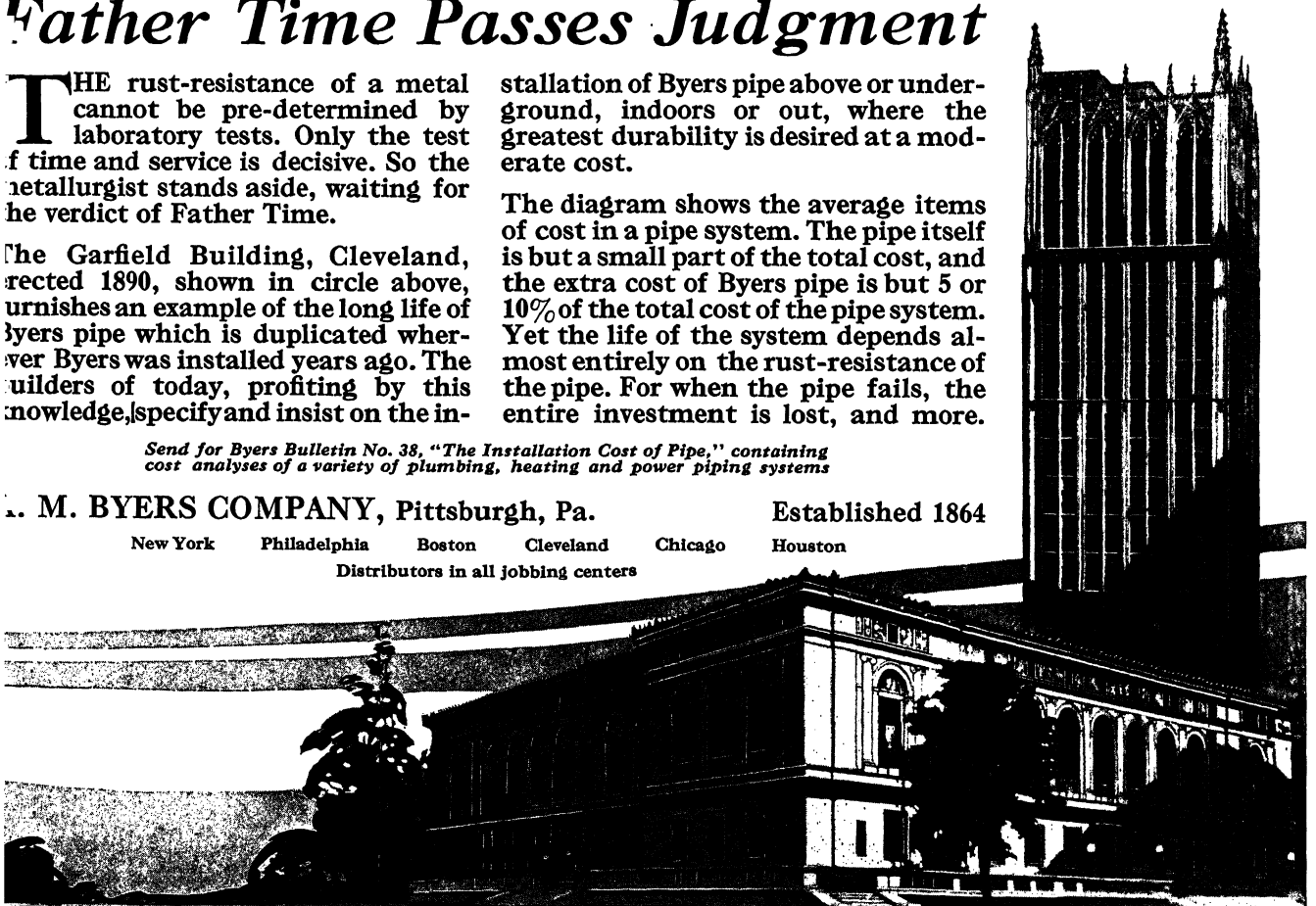
Send for Byers Bulletin No. 38, "The Installation Cost of Pipe," containing cost analyses of a variety of plumbing, heating and power piping systems

A. M. BYERS COMPANY, Pittsburgh, Pa.

Established 1864

New York Philadelphia Boston Cleveland Chicago Houston

Distributors in all jobbing centers



Look for the Name and Year rolled in every length

A BATH Room with Bailey-Farrell Plumbing is a source of pride to the owner and a symbol of home refinement to his guests.

We have equipped several model bath rooms in our Display Rooms at No. 20 Wood Street to show how attractive a bath room can be made.

Everything is in place just as it would be in a modern home.

A visit incurs no obligation to purchase

Bailey-Farrell Mfg. Co.

Display Rooms Offices and Warehouse
No. 20 Wood St. So. 20th and Sidney Sts.
PITTSBURGH, PA.

Southwestern Warehouses
Huntington, W. Va. Charleston, W. Va.

The Fairfacts Company

(Incorporated)

*Manufacturers
China Bath Room Accessories*

234-236 West Fourteenth Street
New York, U. S. A.

Soap Holders	Towel Hooks
Tumbler Holders	Glass Shelves
Tooth Brush Holders	Safety Wall Grips
Sponge Holders	Bathroom Seats
Toilet Paper Holders	Medicine Cabinets
Towel Bars	Bathroom Radiators
Mirrors	

“Biltin” Type Projecting Type

Chicago	Cleveland	Los Angeles
Philadelphia	San Francisco	
Washington, D. C.		

Robertson Process Asbestos Protected Metal

Roofing and siding is made by enveloping a steel sheet with (1) asphalt, (2) asbestos and (3) waterproofing. It is immune to acid, steam, smoke and weather conditions and never has to be painted. It combines the best qualities of corrugated steel with those of built-up roofing.

HH ROBERTSON CO
BUILDING PRODUCTS BUILDING PRODUCTS

First National Bank Building
Pittsburgh, - Penna.



Andrew Carnegie, Benefactor of Carnegie Institute of Technology.

The Halftone Plates in this book were engraved by
IRON CITY PHOTO ENGRAVING CO.
342 Second Avenue, Pittsburgh

AMERICAN BRIDGE COMPANY

Empire Building, 71 Broadway, New York City

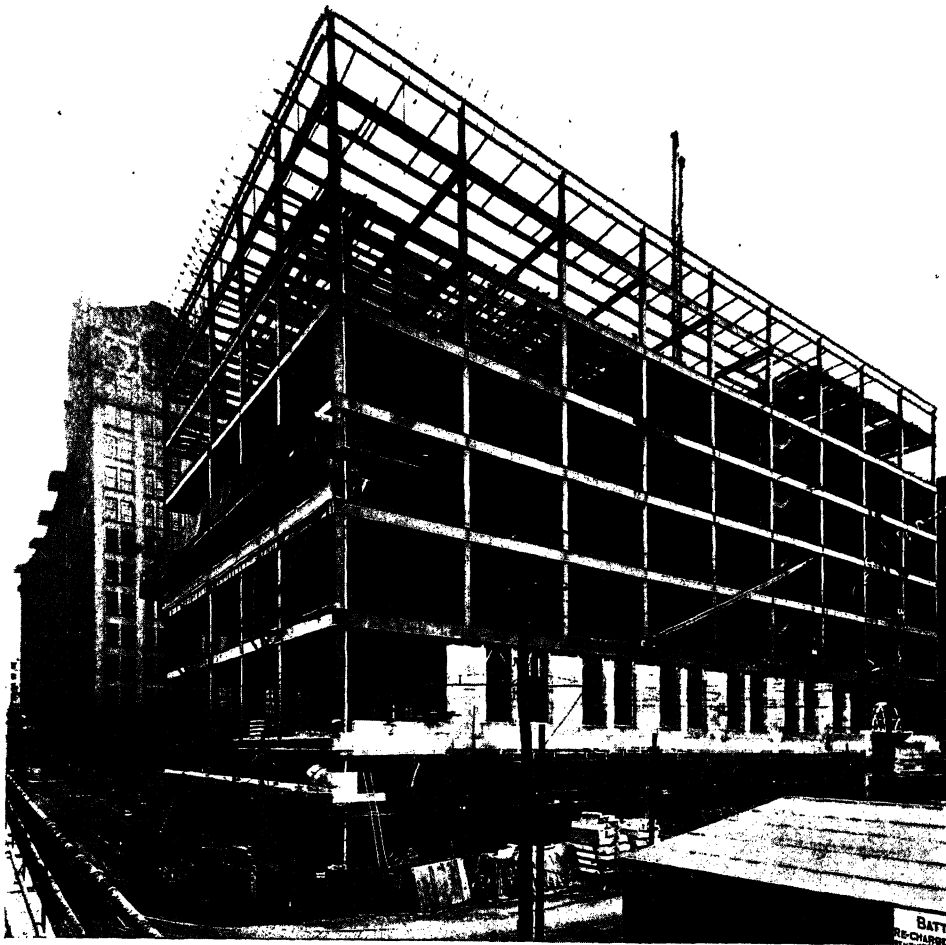
Manufacturers of Steel Structures of All Classes, particularly

BRIDGES AND BUILDINGS

Viaducts Turntables Transmission Towers

Heroult Electric Furnaces

Barges for Rivers and Harbors



Progress Picture—Store Building, Pittsburgh, Pa., for Joseph Horne and Company

SALES OFFICES:

New York	Pittsburgh	Chicago
Boston	Cleveland	St. Louis
Philadelphia	Cincinnati	Denver
Baltimore	Detroit	Salt Lake City
Duluth	Minneapolis	

PACIFIC COAST REPRESENTATIVE:

United States Steel Products Company
Pacific Coast Department
Portland San Francisco Seattle

FOREIGN REPRESENTATIVE:

United States Steel Products Company
30 Church Street, New York City

In Later Life

Early habits are enduring ones.

Begin now to acquire those of saving and accumulating money.

An account with the Mellon National Bank will give you a splendid start. Persistent savings will develop financial independence. The experience, to say nothing of the money itself, will in later life prove invaluable to you.

Come in and talk it over.

Mellon National Bank
Smithfield Street
and Oliver Avenue

FOR SALE—

Homes and Investments



We know the buyers.
List your property with us.



Kelly-Wood
Real Estate Co.

Centre and Hiland

Hiland 8340

We offer to the Investor an
efficient and reliable organization for the transaction
of a

Stock Brokerage Business

Our Bond Department is
equipped and qualified to
serve the bond Investor's
every need.

Moore, Leonard *and*
Lynch

MEMBERS

New York Stock Exchange
Pittsburgh Stock Exchange
Philadelphia Stock Exchange
Chicago Board of Trade

FRICK BUILDING PITTSBURGH, PA.

Phone—5100 Grant

*The Conduit
of Security*



*Rust-Proof and
Acid-Proof*

“SHERARDUCT”

Rigid Steel Conduit

Both Interior and Exterior Surfaces are Sherardized

Comparatively, there is just about the same difference between Sherardizing and other zinc-protective treatments of conduit as between creosoting and painting wood, both in treatment and results attained. The zinc used in Sherardizing is impregnated into the pores of the base metal, forming a zinc-steel, rust-proof alloy which can be neither chipped nor knocked off in handling. Sherardizing produces an absolutely rust-proof conduit, but zinc, while the best rust-preventative known, is subject to the destructive action of acids such as given off in cinders and cinder-fill concrete.

Both Interior and Exterior Sherardized Surfaces are Enameled

to make SHERARDUCT both rust-proof and acid-proof

This is a distinctive feature. Sherardizing protects the steel against corrosion, and the coatings of a clear transparent, baked, acid and alkali proof enamel protects the zinc.

Write for complete information and samples

National Metal Molding Company

Fulton Building, Pittsburgh, Pa.

Boston New York Chicago Atlanta Buffalo Detroit Denver San Francisco Los Angeles Portland Seattle

Pittsburgh Plate Glass Co.

Largest in the World

Manufacturers and Distributors of

Glass—Mirrors—Paint

Warehouses in 43 cities throughout the United States.

Pittsburgh Warehouse—
632-642 Duquesne Way.

Mellon-Stuart Company

Contracting Engineers

New York

Chicago

Pittsburgh

BERNARD GLOEKLER Co.

Manufacturers of

BUTCHERS' AND GROCERS' SUPPLIES

REFRIGERATORS

Complete Hotel, Restaurant, Cafeteria and Institution
Equipment

1127-1133 PENN AVENUE

Pittsburgh, Pa.

ESTABLISHED 1889

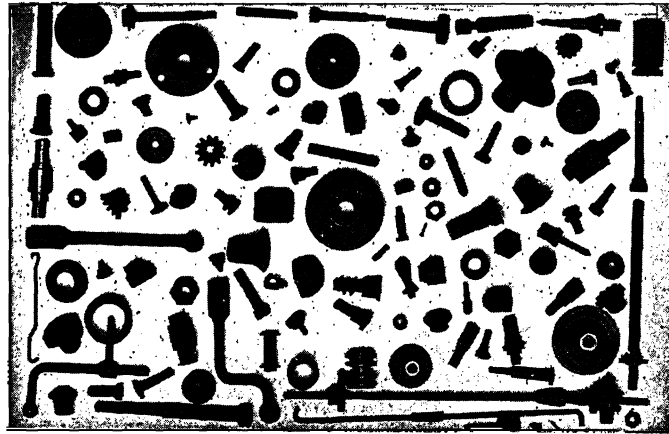
Cable Address—"UNIONDRAWN" NEW YORK

Union Drawn Steel Company

BRIGHT FINISHED STEEL

Manufacturers of

Cold Drawn and Turned
and Polished Shafting
and Free Cutting
Screw Steels
and
Cold Drawn Steel Squares,
Flats and Hexagons
Cold Drawn Special Shapes
Cold Drawn or Turned
and Polished Pump and
Piston Rods
Cold Drawn Elevator
Guides
Cold Drawn or Turned
and Polished Axles



Cold Drawn or Turned and
Polished One Per Cent.
and Three and One-Half
Per Cent. Nickel Steels
and Chromium Steels

Vanadium Steels

Nickel-Chromium Steels

Chrome-Vanadium Steels
Bright Bessemer, Open
Hearth, Alloy and
Electric Steels

For Special Work in a
Wide Range of Analyses

*Complete Laboratory and
Heat Treating Plant*

UNION DRAWN STEEL COMPANY, *General Offices and Works:* Beaver Falls, Pa., and Gary, Ind.

Branch Offices: Boston, Buffalo and Cleveland.

Branch Offices and Warehouses: Chicago, Cincinnati, Detroit, New York and Philadelphia.

Pacific Coast Representatives: The Milton Pray Co., located at San Francisco, Los Angeles and Seattle.

FOR THE SPRING BRIDE— FURNITURE



DAULER-CLOSE FURNITURE CO.
636—SMITHFIELD STREET—638

S. W. Means Lumber Co.

Lumber and Mill Work

Putnam Street, E. E.,
Pittsburgh, Pa.

"MEANS SERVICE—MEANS SERVICE"

TO BUYERS OF
PRINTING WE OFFER

AMPLE FACILITIES
LARGE EXPERIENCE
SATISFACTORY SERVICE

MURDOCH-KERR CO.
STRAWBERRY AND WILLIAM PENN WAY
PITTSBURGH

For Good Lighting

For good lighting, whether for reading a book or for the lighting of show window, painting, church, factory or bank, reflectors of some kind are needed.

Every reflecting surface absorbs some light—there is loss by absorption with every reflection; there is, of course, no reflecting surface that approaches in effectiveness the mirrored surface of silver plated glass.

“Pittsburgh” Reflectors are made of the finest quality crystal glass, clear and sparkling—blown in our own factory that we may control every step of the glass making.

Every reflector is a single piece of glass; double plated with pure grain silver, and this mirrored surface made permanent by a secret process which lays a sheet of copper over the silver. The silver is protected on the one side by the glass and on the other by the copper. Finished in green enamel baked on.

There is a “Pittsburgh” Reflector for every purpose.

Pittsburgh Reflector & Illuminating Co.

Bowman Building - - - - - Pittsburgh, Pa.

Davies & Hughes

*Hatters & Men's
Furnishings*

3615 FORBES STREET
Next to Strand Theatre
OPEN EVENINGS

C. M. STAUFF

Forbes and Boquet Street

*Artists' and Engravers'
Supplies*

STATIONERY

POST-SUN BLDG

OPERATING
DAY & NIGHT



**LIBERTY
ENGRAVING
COMPANY**
PITTSBURGH
PENNSYLVANIA

ENGRAVERS & ILLUSTRATORS

GRANT 1654

Strong Points

- in -

Elliott's Blue Print Service

Experienced Men

Quick Deliveries

Latest Facilities

Central Location

100% Rag Stock

Rich Backgrounds

Sharp White Lines

All Work Confidential

No Order Too Large

PHOTOSTAT PRINT DEPARTMENT

Our Photostat Printing is of the very best, and we produce prints of any desired scale up to 18 x 22 inches, larger prints being furnished in sections. Reductions and enlargements made of drawings, maps, book pages, checks, notes, legal documents, etc.

ARCHITECTS' SUPPLIES

For architects we have everything—the line runs into hundreds of items. Our stock is very complete. You can get anything from a thumb tack to the finest drawing instruments, or largest filing cabinet or drawing table at any time.

*When in need of anything consult the
Elliott "Yellow" Catalogue*

B. K. Elliott Company

126 SIXTH STREET
Pittsburgh

733 PROSPECT AVENUE
Cleveland

VIGNOLA

An Elementary Treatise on Architecture comprising the complete study of the *five orders*, with indication of their shadows and the first principles of construction.

Work divided into seventy-six plates drawn and arranged by

PIERRE ESQUIÈ

former pensioner of the French Academy at Rome.

Translated by

WILLIAM ROBERT POWELL, A. I. A.

76 Plates, size 10x13 inches, bound,
post paid \$6.00.

Architectural Composition

By **PROFESSOR N. C. CURTIS**

This work is based on *GUADET*—"ELEMENTS ET THEORIE DE L'ARCHITECTURE." It contains 250 carefully selected drawings with 300 pages of text and a bibliography of the most useful reference works in architecture.

The work is devoted mainly to the study of plan, such difficult problems as angular connections, curved with rectangular and polygonal rooms. All other phases of architectural composition are covered, viz., fundamental esthetic laws of architecture, walls, doors, windows, roofs and domes, antique orders, vaults, vestibules, corridors, facades and bays, towers, proportion and scale.

*Buckram bound in heavy board covers
size 8x10 inches—price \$6.00 postpaid*

J. H. JANSEN, Publisher
Caxton Building CLEVELAND, O.

OAKLAND SAVINGS & TRUST COMPANY

Member of
Federal Reserve System

"The Oakland Bank"

Capital
\$300,000.00

Surplus and Undivided Profits
\$300,000.00

Deposits Over \$4,000,000.00

SAFE DEPOSIT BOXES FOR RENT

Quality Insurance

Do you measure insurance by the same standards of quality and require the same tests of soundness which you apply to your banking institutions.

**INSURANCE WHICH DOES NOT
INSURE IS ONE OF THE
COSTLIEST THINGS
ON EARTH**

Consult us as you would your lawyer,
without obligation.

May we help you *today*?

Henry P. Haas, Agency

Office Freehold Real Estate Company
H. P. LICHTENTHALER, *Manager*
311 Fourth Avenue, PITTSBURGH, PA.

Court 3092

Union Steel Casting Company

62nd and Butler Streets

Pittsburgh, Pa.

Locomotive Castings
Vanadium and Carbon Steel
Our Specialty

ESTABLISHED 1870



McCRADY BROTHERS
COMPANY

BUILDERS SUPPLIES

LUMBER MILL WORK
CONCRETE BLOCK

STEEL SASH AND BUILDING
SPECIALTIES

_____ YARDS AT _____
BRADDOCK HOMESTEAD WILKINSBURG

THE general trend of business is toward the substitution of Automatic Control for manual operation and the demand for Automatic Control of temperatures is growing rapidly.

Johnson Service
Company

Pittsburgh Office,
354 Century Bldg.

“Scott’s Extra Coated”
Hammered Open Hearth
ROOFING TERNE PLATES
Makes Lasting Roofs, Gutters and Valleys Fire—Resisting

“A standard throughout the country since the early eighties.”

Manufactured by

FOLLANSBEE BROTHERS CO., PITTSBURGH

Mills: Follansbee, W. Va., and Toronto, Ohio.

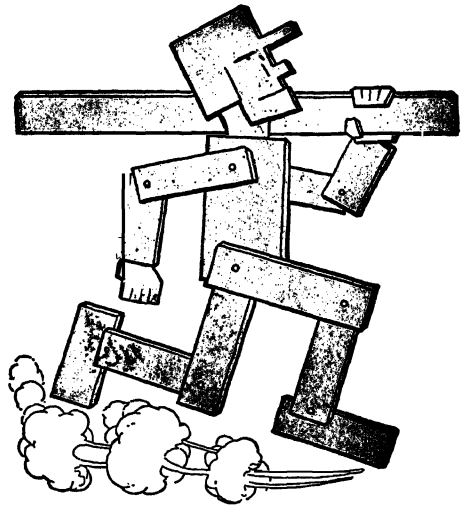
**Challinor - Dunker
Company**

We Print

Pittsburgh, Pa.

77-79 South 13th Street

“The Home of Mr. Goodwood”



The May Sumner Co.

KENNEDY GARDENS

WILKINS AVE. DUNMOYLE ST. FAIR OAKS ST.

Only one lot left in this
beautiful restricted property

NICOLA REALTY COMPANY

1414 Farmers Bank Building
5570 Grant

College & Fraternity Emblems

We Specialize in

Cups, Medals
and Trophies

for Athletic Events

Heeren Bros. Co.

Manufacturing Jewelers

Penn Ave. and Eighth St. Pittsburgh, Pa.

Incorporated 1912

Bell Phone Cedar 2407

Geo. R. Kress Co.

Manufacturers and Expert Erectors of
Underwriters Approved Lightning Rods

1900-02 Brighton Road
N. S., Pittsburgh, Pa.

Scientific protection against the destruction by lightning of
large institutions, buildings, churches, etc., is our specialty

P. & A. 559 Main

Bell 558 and 559 Grant

THE GRAFF COMPANY

STOVES AND RANGES
WARM AIR FURNACES
MANTELS AND TILING

945 Liberty Avenue

PITTSBURGH, PA.

Established 1852

Private Exchange, 225 Court

Incorporated 1902

A. & S. WILSON COMPANY

Contractors and Builders

Fine Residences, Fine Interior Finish, Power Plants,
Warehouses, Garages

J. CHARLES WILSON, *President*

541 Third Avenue

PITTSBURGH, PA.

Bell 2346 Grant

The D. Trozzo Co.

Importers and Wholesale

Grocers

912 WEBSTER AVENUE

Pittsburgh, Pa.

East Pittsburgh Savings *and* Trust Company

East Pittsburgh, Pa.

Capital and Surplus \$ 375,000.00

Total Assets - - \$3,500,000.00

Member Federal Reserve System.

The

T. J. Foley Company

Contractors

— *and* —

Engineers

424 Fourth Ave.

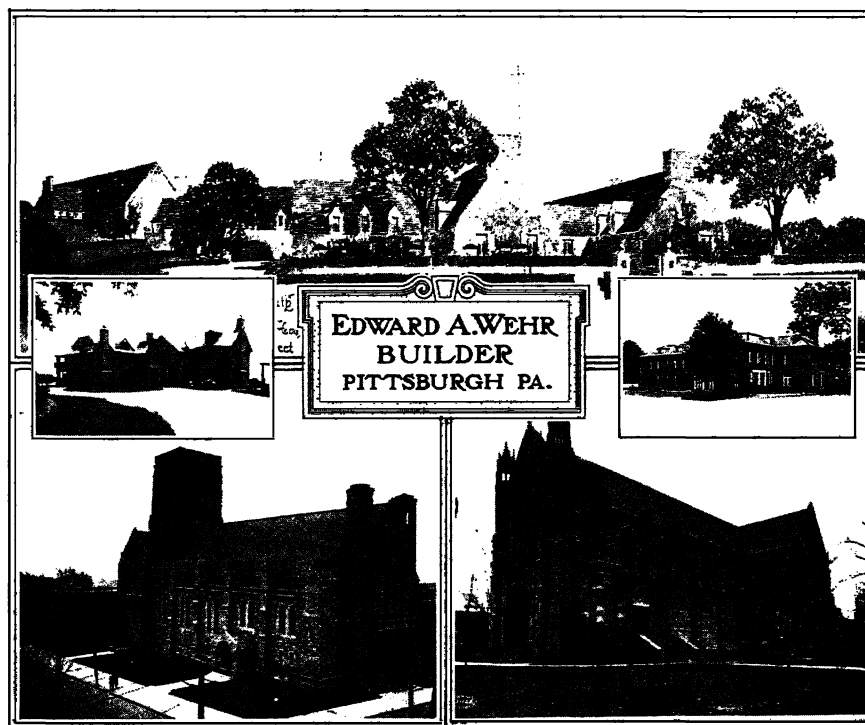
Pittsburgh, Pa.

The Theater Managers' Association of Pittsburgh

sends Greetings to

The Faculty and Student Body of
Carnegie Institute of Technology

ALVIN THEATER
DAVIS THEATER
HARRIS THEATER
GAYETY THEATER
NIXON THEATER
PITT THEATER
SHERIDAN SQUARE THEATER
LYCEUM THEATER



Grant 2485

E. R. CLULEY

**Painting, Decorating
Hardwood Finishing**

106 Marion Street Pittsburgh, Pa.

**Crowther
& Company**

Certified Public Accountants

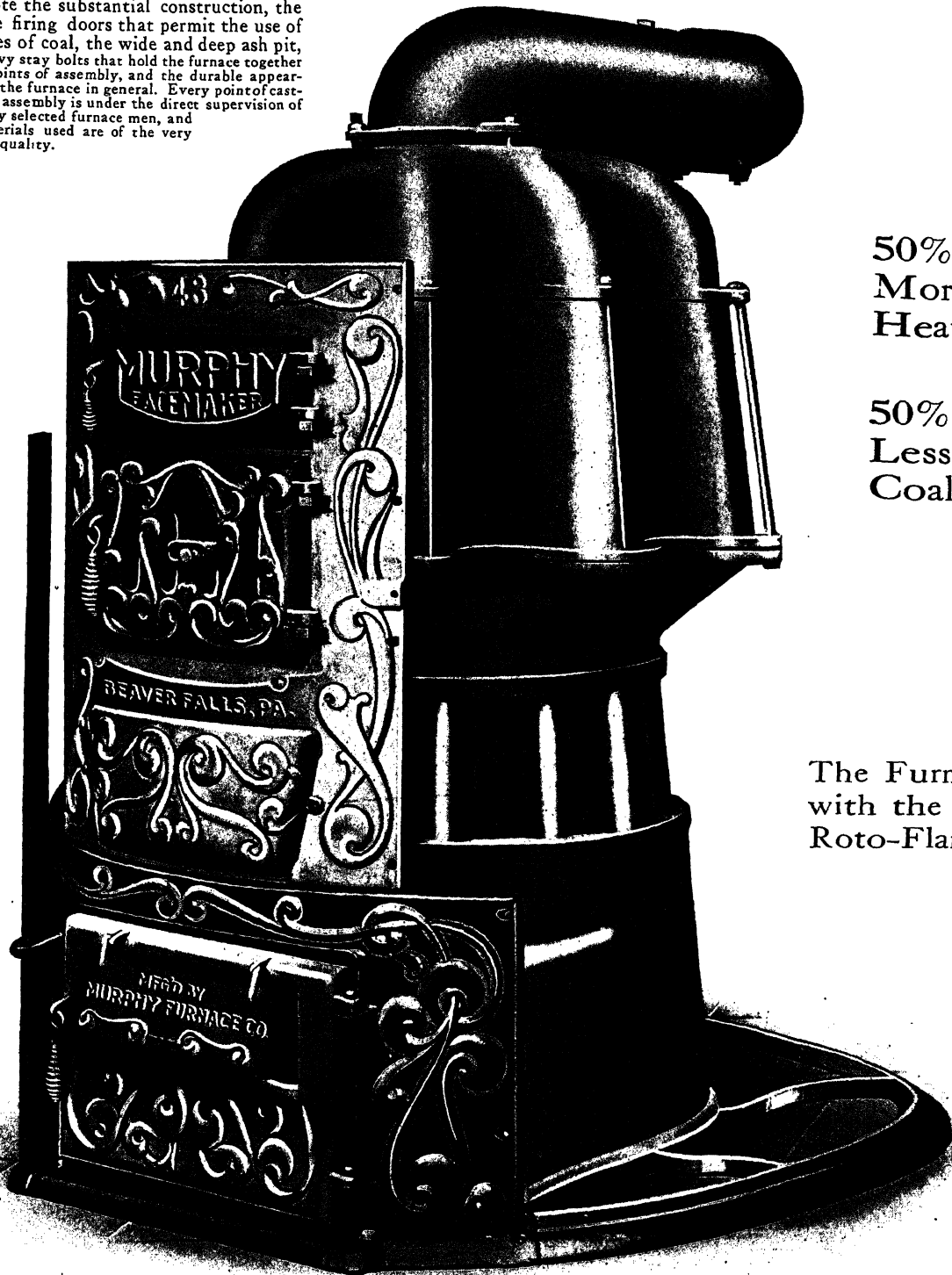


First National Bank Building
Pittsburgh, - - Pa.

THE MURPHY PACEMAKER

(WITH CASING REMOVED)

Note the substantial construction, the double firing doors that permit the use of all sizes of coal, the wide and deep ash pit, the heavy stay bolts that hold the furnace together at all points of assembly, and the durable appearance of the furnace in general. Every point of casting and assembly is under the direct supervision of carefully selected furnace men, and the materials used are of the very highest quality.



50%
More
Heat

50%
Less
Coal

The Furnace
with the
Roto-Flame

SEND FOR DESCRIPTIVE LITERATURE NOW

MURPHY FURNACE CO. Beaver Falls, Pa.

RUDY BROTHERS COMPANY

Designers and Workers in
LEADED GLASS



Highland and Centre Avenues
PITTSBURGH

Branch Factory, York, Pa.

The W. G. Wilkins Co.

*Engineers
and
Architects*

Joseph F. Kuntz, *Architect, R. A.*
Wilber M. Judd, *R. E.*

Westinghouse Building,
Pittsburgh, - Pa.

Iron City Heating Co.

Contracting and Consulting
Engineers

Steam Heating
Hot Water Heating
Ventilating

843-847 Jackson Street
Pittsburgh, Pa.

Bell Phone, Cedar 2125-2126

P. H. Butler Co.

*For Better
Groceries*

There is a store near you

George H. Soffel Co.

Plumbing and Drainage Contractors

127 Fourth Avenue,
Pittsburgh, - - Pa.

Bell Phone 1860 Court

Houston Brothers Company, Incorporated

*Wholesale
Builders Supplies*

Roofing Slate Hollow Tile
Face Brick

Main Office: Chamber of Commerce Building
Pittsburgh, Pa.

Hipco Wireless B Batteries

Hipwell Manufacturing Company
835 North Avenue, N. S.
Pittsburgh, Pa.
Bell Phone: Cedar 7310

Office, 1441-R Fisk — PHONES — Res. 1198-R Fisk

H. SCHULZ

SLATE, TIN AND SLAG

ROOFING

224 Pearl Street, - Pittsburgh, Pa.

ST. LOUIS INDEPENDENT PACKING COMPANY

Independent Packers

E. G. BARBER, *Manager*

Dealers in

BEEF :: VEAL :: PORK :: PROVISIONS
BOILED HAM SAUSAGES SMOKED MEATS
BUTTER CHEESE HYGRADE OLEOMARGARINE

Now in our new building at **6592 Hamilton Avenue.**

All our Sausages and Boiled Ham made on the premises.

Scarborough & Klauss Co.

Hardware, Tin Roofing
and Furnace Work

3809 FIFTH AVENUE
Pittsburgh, Pa.

Established 1869

Smithfield 125

Walter E. Hague
& Son

Gold, Silver, Nickel and Bronze

Platers

Arrott Power Building No. 1
Barker Place below Penn Avenue
Pittsburgh, Pa.

LATEST STYLES

in FORMAL DRESS

at Lowest Price in City

\$3.50

Dress Suit Rental Co.

404 Pittsburgh Life Building

Phone—Smithfield 0294



SUBSCRIBED TO
BY A FRIEND

Glouinger & Co.

Face Brick



15th Floor Arrott Building

Phone Court 0588

Compliments
of the

ELLWOOD LUMBER
COMPANY



Headquarters in the U. S. A. for

BOILER TUBES

Charcoal Iron—Seamless and Lap-Weld Steel. Largest Warehouse Stocks Anywhere. Immediate Shipments from Pittsburgh or New York, also Tubular Products of all Kinds; Bedstead Tubing, Untested and Light Weight Pipe.

JOHNSON-PETER COMPANY

No. 51 Pittsburgh Terminal Warehouses, Pittsburgh, Pa.
Warehouse No. 34, Bush Terminal, Brooklyn, N. Y.

"Honestly Rebuilt" Electrical Machinery

The "Know How"—that "Mental Attitude" acquired through years of honest endeavor and representation makes for "High Grade Product and Intelligent Service." Your "Confidence" in our organization will not be misplaced.

"SPECIALISTS" in the application and sale of Electrical Machinery for Mill, Mine and Industrial Service, and the Rebuilding of Large Electrical Apparatus.

Our Line of "**Honestly Rebuilt**" Motors and Generators Guaranteed Electrically and Mechanically Perfect and in appearance like new. A carefully trained organization, modern machinery. A Built to Order Shop and Warehouse and a definite manufacturing routine with a series of tests and inspections conforming with Standard Electrical Practice, enables us to Rebuild Second Hand Electrical Machinery and produce a product of absolute "Equal to New" value.

Miller-Owen Electrical Co., Inc.

Lexington Avenue and Thomas Boulevard
Pittsburgh, Penna.

The Public Health Nursing Association, Inc.

American State Bank Building
600 Grant St., PITTSBURGH, PA.
GRANT 8680

*Indorsed by the Committee on Charities and General
Subscription Investigation of the Chamber of Commerce.*

*Corporate Members of the National Organization for
Public Health Nursing*

American Child Health Association

National Conference of Social Work

WHAT THE PUBLIC HEALTH NURSING ASSO- CIATION IS DOING FOR YOUR COMMUNITY.—

It provides graduate registered nurses trained in public health to give skilled nursing, care to the sick in their own homes, to render emergency care and to teach the prevention of disease and the promotion of health. This service reaches the actually ill, the tubercular, the crippled, the aged and the incurable and is given without discrimination to race, creed, color or the type of disease. This skilled nursing care is given on a visiting basis to those who can pay a small nominal fee. The Association's field embraces the City of Pittsburgh and surrounding suburbs.

Staley & Patton

Printers - Engravers - Stationers

Announcements Invitations

Calling Cards Business Cards

Stationery Art Novelties

X'mas Greeting Cards

Fraternity Stationery

Quality

Court
5616

Service

Suite 613 Maloney Building

339 Boulevard of Allies

Pittsburgh, Pa.

Phone Bell 1272 Court

Schaffer Heating Co.

Specialists in
Vapor and Steam Heating
Hot Air, Hot Water

Manufacturers of
*The Patented Novelty Ventilated
Wall Pipe*

108 Wood Street,
Pittsburgh, Pa.

STAR Tiling Company

Tile Work

Walls—Floors—Fireplaces

1905 Boulevard of the Allies
Pittsburgh, Pa

Bell Phone Grant 1015

F. Van Malderen

Sculptor

Plaster and Staff
Ornaments

Granite, Marble and
Stone Carving

Watson and Jumonville Streets
Pittsburgh

Liberty Bread

*Is Your
Best Food*

RUUD

The All-Quality Line

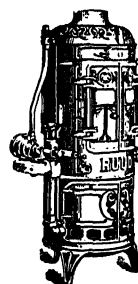
The first RUUD was built in 1889—over thirty-four years ago.

There is a RUUD for every condition and every requirement. Into each type and size is built that superiority of design and construction which comes only from experience.

RUUD today builds the only complete line of All-Quality Automatic Gas Water Heaters.

*Descriptive bulletins, bound up in convenient
form for your permanent file, will be
furnished upon request.*

**RUUD MANUFACTURING COMPANY
PITTSBURGH, PA.**



SCOTT A. WHITE

Renshaw Building
PITTSBURGH, PA.

Architectural Terra Cotta

Tile, Slate ROOFING Slag, Asphalt

Northwestern Terra Cotta Co.
Akron Roofing Tile Co.
Master Builders' Co.
Nalecode (Nailing Concrete)

M. LANZ Brick & Tile Co.

Manufacturers of

Smooth Face, Rough Tex-
ture and Common
BRICK

Offices
2907 Carson Street

Works and P. R. R. Siding
Thirty-fourth and Jane Streets

PITTSBURGH, PA.

"We make all kinds"

CHAIN

Dredge Chain
Conveyer Chain
Log Haul Chain
Loading Chain

Hoisting Chain
Railroad Chain
Ship's Cable Chain
Steering Geer Chain

Tire Chains

THE MOST THOROUGHLY TESTED
CHAIN MANUFACTURED



United States Chain & Forging Co.

Union Trust Building

PITTSBURGH, PA.

The Duquesne Trust Company

Duquesne, Pennsylvania

A. N. DIEHL,
President

L. H. BOTKIN,
Vice President

S. G. WORTON,
Vice President

J. R. DAVIES, JR.,
Sec'y and Treas.

ROBERT LAING,
Assistant Treasurer

E. J. SCHORR,
Assistant Secretary

Byron W. King's School of Oratory

A Conservatory of Speech Arts

Mt. Oliver Sta.
Pittsburgh, Pa.

*Courses for Teachers and all
Public Speakers*

*Correction of speech defects,
abnormal voice, etc.*

Prospectus sent on request.

Frink Reflectors

Bank Screen Reflectors
Double Desk Reflectors
Single Desk Reflectors
Operating Table Reflectors

Window Reflectors
Picture Reflectors
Chancel Reflectors
Cove Reflectors

Polarlite Signs
Linolite Lamps
Show Case Reflectors

Special Reflectors to Meet Every Requirement.

I. P. FRINK, Inc.

New York
Boston

Philadelphia
San Francisco

Cleveland
Buffalo

Chicago
Detroit

The
Bushnell Machinery
Company
Sales Engineers
Pittsburgh

*Mechanical Equipment
for All Types
of Buildings*

Fans Exhausters Air Washers
Vacuum Cleansing Systems
Pumps for Every Service

PITTSBURGH
SCREW & BOLT
COMPANY

Bolts

Nuts

Rivets

RELIANCE LIFE INSURANCE
COMPANY
OF PITTSBURGH

Farmers Bank Building

Originator of the
“Perfect Protection Policy”

AMERICAN
REDUCTION
COMPANY
of PITTSBURGH



1942 Forbes Street,
PITTSBURGH, PA.

Compliments of
Chatfield & Woods
Company



AMERICAN ZINC & CHEMICAL CO.

WORKS: LANGELOTH, PA.

OFFICE: Oliver Building, PITTSBURGH, PA.

Producers of

Zinc

Prime Western and Brass

Zinc Oxide Zinc Sulphate Zinc Dust Salt Cake
Niter Cake Sulphuric Acid Coal

Buyers of Zinc Ores

SOLE AGENTS

THE AMERICAN METAL CO., Ltd.

61 Broadway NEW YORK

Hotel Schenley of Schenley Park

*PITTSBURGH'S
DISTINCTIVE
HOTEL*

Table d'Hote Dinner & Musical Program
every Sunday and Thursday evening

\$1.75 Cover

Also excellent a la Carte Service



Headquarters for
COLLEGE SOCIAL ACTIVITIES

National Valve *and* Manufacturing Co.

"Navco" Valves
and Fittings

Complete Piping Installations

Arsenal Station
PITTSBURGH, PA.

Office and Works: 31st and Liberty Avenue

Cable Address "Navco" Western Union Code

BRANCH OFFICES

New York Chicago Cleveland
Atlanta Philadelphia

West Leechburg Steel Company

*Manufacturers of
Hot and Cold Rolled
Strip Steel*

*For difficult drawing and forming
Hoops and Bands*

General Offices:
Farmers Bank Building
Pittsburgh, Pa.

Glenshaw Glass Co., Inc.

Manufacturers of

Flint, Green and Amber Bottles

Glenshaw, Pa.

PUMPS

Not just Pump People
but—

“Pump Specialists”
Read that again.

REINEKE-WAGNER PUMP AND
SUPPLY CO.

416-418 First Avenue

Pittsburgh, Pa.

Kidd Drawn Steel Company

Manufacturers of

Drill Rod and Cold
Drawn Steels

*Special Shapes in Soft and
Tool Steels*

Aliquippa, Pa.

Old

Strong

Popular

Union Central Life Insurance Co.

Cincinnati, Ohio

Famous for Good Service, Big Dividends,
Low Cost Insurance.

Ranks first in Liberal Dividends and Low
Net Cost per thousand among sixty-two
policies issued by American Companies
on John Wanamaker's life..

Assets \$175,000,000.

Insurance in force nearly a Billion Dollars.

57 years of Progress and Prosperity.

W. C. LYNE & SONS, Managers
Farmers Bank Building

Our seeds and bulbs are in demand every where because of the confidence of 47 years of satisfactory service.

Illustrated catalog free.

Beckert's Seed Store

101-103 Federal St., N. S. Pittsburgh, Pa.
Cedar 4210

EAGLE PLANING MILL General Mill Work

TELEPHONES: Bell 5408 Cedar. P. & A. 18 North

M. SIMON'S SONS

Dealers in

BUILDING AND HARDWOOD LUMBER

Cor. Anderson and Gen. Robinson Streets
North Side Pittsburgh, Pa.

DISTINCTIVE ARTISTIC EXCLUSIVE

THE MUNHALL CO.

Expert makers of

Engraved Stationery
and Novelties

600 Bigelow Blvd. Pittsburgh, Pa.
Grant 2035

MAIN OFFICE AND WORKS
Corner Bryant, St. Clair and Mellon Streets

CITY OFFICE
631 Penn Avenue

EAST END OFFICE
S. Highland Avenue and Baum Boulevard

Oswald Werner & Sons Co.

Largest Dyers and Cleaners

TELEPHONES: 6400 Hiland, Bell
555 East, P. & A.

Pittsburgh, Pa.

WHEN YOU ARE PREPARING

for the big social events no doubt you are as particular about your appearance as we are in doing the kind of work that will improve it.

We have twenty expert operators in the following departments:

MANICURING	MARCEL WAVING
FACIAL MASSAGE	HAIR DRESSING
HAIR CUTTING	EYE BROW ARCHING
HAIR CURLING	HAIR DYING

Our Specialties are: Permanent Waving, Hair Tinting

R. BISHINGER

Grant 9354 510 Penn Avenue

JOHN EICHLEAY JR. CO.

Steel Construction Structural Steel
House Raising and Moving
Shoring and Foundation Work

Steel Derricks, Hoisting Engines, Steam Shovels,
Locomotive Cranes, Dump Buckets, Jacks,
House Movers' Equipment—For Sale or Hire.

SOUTH 20th and WHARTON STREETS
PITTSBURGH, PA.

Phones: Hemlock 420, 421, 422, 423, 424

A. B. C. Brand

Prepared Mustard

MAKES TASTY FOODS TASTE BETTER

Manufactured by

Lee Chattaway-Jacobs Company

Pittsburgh, Pa.

Janitors Supply Co.

Headquarters for

Janitor's Supplies

Corner 3rd and Market Court 3727

RENAUD'S

Fine Baked Goods and
Confections

SQUIRREL HILL and HOMESTEAD

COMPLIMENTS

IRON CITY SASH
& DOOR CO.

PITTSBURGH

Rolling Mills *OF ALL KINDS AND TYPES*

"Adamite" *ROLLS* "Manganite"
CHILLED, SAND and STEEL

Steel and Iron Castings Up to 75 Tons
Brass Castings

"Adamite" and Special Steel Castings
Shears, Saws, Presses, Roll Lathes, Hydraulic
Machinery and Other Mill Equipment
Cast and Cut Teeth Gears and Pinions
(Spur Bevel—Helical)

Annealing Boxes and Bottoms

The Best in Rolling Mill Machinery

Mackintosh-Hemphill Co.
Pittsburgh, Pa.

Fort Pitt Foundry
A. Garrison Foundry
Woodard Machine Co.
Pittsburgh Iron & Steel Foundry

Bell Phones 2190-2191 Cedar
P. & A. Phone 165 North

Bowman Supply & Mfg. Co., Inc.

Plumbing Supplies
Sanitary Specialties
Pipe Fittings and Valves
Steam, Gas and Water Supplies
Water Supply Systems
Steel and Wrought Iron Pipe
Warm Air Furnaces
Steam and Water Boilers
Smokeless Heating Boilers
Hot Water and Steam Radiators
Heating Specialties
Mill and Mine Supplies

886-892 Progress Street
Pittsburgh, - - - Pa.



Grocers', Butchers'
and Household
REFRIGERATORS

Old coolers taken in trade.

Buy Direct from Manufac-
turers and Save Money.

We have our own factory, our own timber land consisting of 4,400 acres of that good old rough Vermont Oak. We carry in stock for immediate delivery by our own trucks, over 200 styles of refrigerators for all purposes. Easy payment plan. Some bargains in old coolers. Complete Grocers' and Butchers' Fixtures.

THE HOWE SCALE CO.

110 Wood Street
PITTSBURGH
Phone Court 0243-0244



Compliments of

Lewin-Neiman Co.

Castings Patterns

Machine Shop Work

High Grade
Aluminum, Brass, Bronze, Iron and
Semi-Steel Castings
Wood and Metal Patterns

Complete Machine Work Facilities

—
We will appreciate an opportunity to quote you.

LOCOMOTIVE STOKER COMPANY

30 General Robinson Street, W.
North Side, Pittsburgh, Pa.

Dress Clothes

are too expensive to be
bought—

You can **Hire** them
from us!

Complete Renting
Outfitters
(Head to Foot)

Formal and Informal
Occasions

WHITTINGTON DRESS SUIT CO.

6002-3-4 Jenkins Arcade, Pittsburgh
Phone, Smithfield 0341



LEE C. MOORE CO.

*Tubular Steel
Derricks*

PITTSBURGH, PA.
TULSA, OKLA.

GREENSBORO GAS COMPANY

COMPLIMENTS OF
J. H. KENNY

STRAND
BOWLING
ALLEYS



COMPLIMENTS
SKIBO INN



Complimentary